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SEEDS

from
the North

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U. S. Department of Agriculture



FRONT COVER
VEGETABLE
COLLECTION

A FULL-SIZE PACKET OF EACH

GOLDEN ACRE CABBAGE	15c
KENTUCKY WONDER BEAN	15c
P. S. SPECIAL TOMATO	10c
GRADUS PEA	15c
GOLDEN 1/2 LONG CARROT	05c
EARLY WONDER BEET	05c
SCAR. WH. TIP RADISH	05c

VALUE 70c

50¢

Murphy's

SEED STORE

Albany, Oregon
D. N. Shoemaker

The SEEDS we offer in this book represent, so we believe, the very best quality and most suitable sorts obtainable for this section. They are produced by experienced growers, in a section favored by nature for seed production with an equitable climate, rich productive soil and abundant rainfall.

They are cleaned, tested and packed with the most modern machinery and in accordance with the most approved methods.

We offer them to you backed by the assurance of the producer that they are to give you complete satisfaction. We take great pride in recommending them to you and do so only because we are confident that by so doing we are serving your best interests. Our reputation depends on the quality of the merchandise we sell and the faith we have in the seeds we offer merits your patronage, so we honestly believe.

SEEDS from the NORTH

Our new catalog of Vegetable, Flower and Field Seed is presented with greatest pleasure.

In its pages are listed only the best strains of those seeds that are by nature adapted to common culture in this locality and because of these qualities are deserving of a place in your garden.

You Will Profit


Through Our

Greater Buying Power—Reduced Selling Cost

Through our affiliation with a large group or chain of Seed Dealers representing practically every trading center in the Northwest, who are associated with Puget Sound's largest and most experienced seed growing concern, we are able to offer you the best quality trademarked seeds that it is possible to buy at the same price demanded for other seed. Our fortunate connections with these other merchants and growing headquarters gives us tremendous purchasing power and reduces our selling expense which can be passed on to you in added value and reduced cost.

Our nearness to the source of our supply, where large stocks are carried for us under proper storage conditions, make it possible to get for you any item that we do not regularly carry, or to replenish our stock of fast selling sorts, always with the assurance that the quality will be uniform and the stock fresh and dependable.

SATISFACTION OR YOUR MONEY BACK

 Verified SEEDS from the NORTH are sealed in trademarked packages to insure their freshness, preserve their purity, guarantee their genuineness and make their identification easy. They represent the result of many years of painstaking effort and experience in seed production and marketing and are of the most improved strains and highest quality, they will therefore give complete satisfaction.

Any package found unsatisfactory will be replaced free of charge on return of the empty package.

The Sealed, Trademarked Package is Your Best Insurance

SEEDS from the NORTH



A Glimpse of the Testing Grounds. Many Are Tested—Few Are Chosen



A Seed Field in Full Bloom. This One Is Cabbage



The Ripened Seed Crop Being Gathered for Threshing

SPECIAL COLLECTION OFFERS

Why not start your seed order this year with one or more of these money-saving offers

Front Cover VEGETABLE Collection

Illustrated on the front cover of this book and consisting of a regular full sized packet each of—

Golden Acre Cabbage.....	15c	Gradus Pea	15c
Early Wonder Beet.....	5c	Puget Sound Special Tomato.....	10c
Kentucky Wonder Bean.....	15c	Golden Half Long Carrot.....	5c
Scarlet White Tipped Radish.....		5c	

70c Value for 50c

Back Cover FLOWER Collection

A regular 10c packet each of the following flower seeds in mixed colors, illustrated on back cover.

No. 1177—Columbine, mixed.	No. 444—Gaillardia, mixed.
No. 1134—Scabiosa, mixed.	No. 1154—Verbena, mixed.
No. 116—Calliopsis, mixed.	No. 84—Stocks, mixed.

60c Value for 40c

DAZZLER Collection Crego Giant ASTERS

Here is an opportunity to get a packet of each color of these popular garden favorites at a special price.

No. 1012—White.	No. 1077—Blue.
No. 1037—Lavender.	No. 1036—Crimson.
No. 1013—Pink.	No. 1078—Purple.

Six 10c packets at the special collection price of 40c

BUTTERFLY Collection SWEET PEAS

Giant Waved Spencers

No. 1194—Barbara, salmon.	No. 1119—Mascott's White, white.
No. 949—Countess, rose pink.	No. 1123—Tangerine Imp., orange
No. 1009—King Edward, crimson.	No. 1049—Wedgwood, light blue.

Six especially fine sorts in this special collection for 40c

RAINBOW Collection Double Giant ZINNIAS

Zinnias are becoming more popular each year—why not grow lots of Double Giants this year.

No. 1155—Golden Yellow.	No. 1158—Crimson.
No. 1156—Lavender.	No. 1186—White.
No. 1157—Pink.	No. 1182—Canary Yellow

Six packets worth 60c all for 40c

Each Collection Packed in a Colored, Pictorial Envelope

Vegetable Seeds

1 oz. for 40 feet
of row

ASPARAGUS

2 lbs. makes plants for
an acre

Start Your Own Asparagus Bed This Year

It takes three years to establish a good asparagus bed from seed; during this time frequent cultivation and heavy fertilization should be practiced. Do not cut any shoots for table use during this time. Start the plants in mellow, rich soil in spring in rows one inch deep and 16 inches apart and thin to three inches. Transplant the first fall to the permanent bed, setting the roots 6 or 7 inches deep in rows 5 to 6 feet apart and 2 feet apart in the rows. Make a heavy application of Morcrop Fertilizer each fall and before hilling in the spring, spread half a pound of common salt per square yard over the rows.

JULY'S WASHINGTON GIANT RUSTPROOF—Thick, heavy, rustless shoots, of rich, dark green color, heavy producer of exceptional flavor.

Pkt., 10c; Oz., 50c; ¼ lb., \$1.50

CONOVERS COLOSSAL—Early, large white shoots, tender and delicious.

Pkt., 10c; Oz., 20c; ¼ lb., 45c

GIANT ARGENTEUIL—A French sort having very thick green shoots with few scales and round heads.

Pkt., 10c; Oz., 20c; ¼ lb., 45c

PALMETTO—Early and prolific, thin-pointed shoots, deep green.

Pkt., 10c; Oz., 20c; ¼ lb., 45c

ARTICHOKE oz. for 200 plants

Green Globe

Grow in rich, mellow, warm soil setting the plants 3 feet apart in rows, 5 feet apart; mulch the plants well over winter.

Although the Artichoke is perennial, the plant declines in vigor after it has borne two or three crops and new plants should be started every other year. These outer scales and the bottom of the head are eaten raw or cooked. The "choke" or florets inside are removed.

Edible heads are produced the second season.

"LARGE FRENCH" ARTICHOKE, the most satisfactory variety, a good producer.

Pkt., 10c; Oz., \$1.25

ARTICHOKE, JERUSALEM—See Index.

BEANS

**It's Easy to Grow This
Nutritious Food in Plenty**

Field Beans

1 lb. per 300 ft. row. 60 to 75 lbs. per acre.

Generally grown the same as Bush Beans except that the rows are placed far enough apart to allow for horse cultivation, and they are not harvested until the seed is fully matured. They mature in about 90 days.

Pkt. 15c ½ lb. 20c 1 lb. 35c 10 lbs. \$3.00

JULY'S LADY WASHINGTON—Earlier, larger and more productive than the Navy Bean. Especially adapted to the West.

SMALL WHITE NAVY—The universally popular "Navy Bean," excellent for baking as well as boiled or in soup.

Lima Beans

1 lb. for 100 hills

Tall lima beans will not usually succeed in the Northwest, but the dwarf limas are more or less successful. The culture is the same as for bush beans. Plant on edge with the eye down. Ready for use in 80 to 95 days.

Pkt. 15c ½ lb. 25c 1 lb. 50c 10 lbs. \$4.50

JULY'S KING OF THE GARDEN—Seeds and pods both large.

OREGON POLE LIMA—Pods have three to five large beans of finest quality.

BURPEE'S BUSH LIMA—A medium early bush variety bearing very large pods.

BEANS

The Perfect Food
Freshly Picked They Are Most Wholesome

Bush Varieties

1 lb. for 250 feet of row. 90 lbs. plants
an acre.

Bush Beans are easy to grow, and for that reason are more extensively grown than the pole varieties. They should not be planted until late in spring, after all danger of frost and chilly weather are past and the soil is thoroughly warmed. They are ready to eat in 40 to 65 days. For succession plant at intervals of a week or two weeks until the middle of June.

The ordinary Bush Beans make no great demands for soil fertility. They do well on ordinary soil. Planting in hills of 3 or 4 every 16 inches, or, in drills 3 or 4 inches apart singly, are both good methods, the rows being 2 to 3 feet apart. Cover loosely 1 to 1½ inches deep. Keep the soil well cultivated and pick the beans as soon as ready, clean picking promotes continuous production. Beans should not be cultivated when wet with dew or rain as that promotes the development of rust.

Prices All Varieties

Pkt., 15c; ½ lb., 20c; 1 lb., 35c
10 lbs., \$3.00

Green Podded Sorts

BURPEES STRINGLESS GREEN POD—

A very early, hardy, green-podded bean of excellent quality. The pods are round, straight, about five inches long, very meaty and entirely stringless.

REFUGEE 1000 TO 1—Very productive, slender round pods of fine quality, medium late, in favor for canning.

DWARF HORTICULTURAL — Medium length, green pods splashed with bright red, quite early, useful green or dried.

BROAD WINDSOR—The old English "Broad Bean" used largely as a green-shelled bean, pods are borne upright at the axil of the leaf and stem.

BLACK VALENTINE—The pods are nearly round or slightly flattened, medium size, dark green. They hold their attractive appearance on the market.

Yellow Podded Sorts

JULY'S GOLDEN WAX—Very popular for both the home garden and for market. The pods are of medium length, broad, flat, golden yellow, very fleshy, wax-like and stringless. The plants are erect, compact, and produce early and abundantly.

BLACK WAX—A black seeded exceptionally productive yellow waxy podded bean, pods are curved and well rounded.

DAVIS WHITE WAX—Pods are uniform in size, flat, very long, light yellow in color, stringless. Seed is white.

GOLDEN JERSEY WAX—An improvement on Golden Wax, pods are larger, more fleshy and if possible more brittle, waxy and stringless.

JONES STRINGLESS—Delicious, waxy yellow pods, very large, almost straight, plump and brittle, stringless and fine flavored, seeds are white.

Growing Pole Beans

Plant one inch deep in hills 2 to 3 feet apart, in rows 4 feet apart, allowing four or five plants to the hill. Poles 7 to 8 feet long make the best supports. Ready for the table in 70 to 90 days.

Pole Varieties

1 lb. for 125 hills. 25 to 40 lbs. per acre.

Prices All Varieties

Pkt., 15c; ½ lb., 20c; 1 lb., 35c
10 lbs., \$3.00

JULY'S KENTUCKY WONDER—One of the best early pole snap beans for home or market. The snap pods are green, with wrinkled surface, very long, curved, extremely brittle, without fibre. See Also Front Cover Collection.

KENTUCKY WONDER WAX—This vigorous wax podded pole bean is very similar to the green podded Kentucky Wonder, but the pods are a little broader.

CARMINE—The best all purpose pole bean for the Northwest. Yellowish pods, splashed carmine, stringless.

OREGON GIANT—The green pods are fleshy, 10 to 12 inches long and stringless. Plants are vigorous and hardy.

LAZY WIFE—A popular late variety, pods green, seed white, kidney-shaped, excellent dry shell beans. Superior as snaps.

TALL HORTICULTURAL—As a general purpose, late snap and green shell bean for home and market this variety is very popular.

SCARLET RUNNER—See Index.

Inoculate Bean
Seed with No. 5
Farmogerm for
Best Success.



BEETS

Have Delicious Tender Young Beets All Season
By Making Succession Plantings Every Two Weeks

Table Varieties

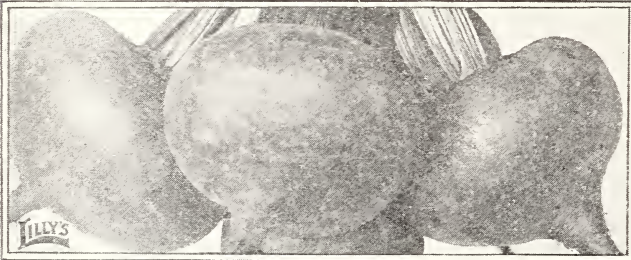
1 oz. for 100 feet of row. 10 to 15 lbs. plants
an acre.

Like all root crops the beet needs a loose, light, rich soil which must be in the best condition of tillage. Only good commercial fertilizer like Morcrop, or well rotted manure should be used. Plant in rows 14 to 20 inches apart and thin to 3 inches in the row. Cover the seed one inch deep. Succession plantings should be made, the first one as early as the ground can be worked in the spring. The round or turnip varieties are often ready for use in 6 to 8 weeks.

Prices All Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 35c
Lb., 95c

JULY'S EARLY WONDER—It may be sown early, and it matures very rapidly. It is uniform in growth, the root is nearly globular in shape, slightly flattened. The leaves are of medium size, and the color of the flesh is deep blood red. See Also Front Cover Collection.



JULY'S DETROIT DARK RED—Considered the best beet for market, and on account of its uniformly deep rich color the most desirable for canning. The leaves are dark green shaded with red. The roots are medium-sized, globular or nearly round, very smooth and of dark red blood color, zoned with a lighter shade.

EARLY EGYPTIAN—An extra early variety, suitable for forcing. The beets are small and flattened, dark red, sweet and tender.

CRIMSON GLOBE—Almost globular in shape, perfectly smooth, medium sized, flesh is deep crimson, very delicious, medium early.

CROSBY'S EGYPTIAN—Better than the old Egyptian from which it has been derived, early, smooth, tender, dark red flesh of finest quality.

EARLY BLOOD TURNIP—A flat turnip-shaped, early sort. The flesh is deep red, ringed pink, sweet and crisp.

LONG SMOOTH BLOOD—A standard long, late variety, flesh is deep purplish red of good quality. An excellent keeper.

ECLIPSE BLOOD TURNIP—Very early, of uniform, globular shape, deep red color, fine grained, tender and sweet.

MANGEL BEETS—See Index.

SUGAR BEETS—See Index.

BROCCOLI

Don't Fail to Plant Some
For Winter and Early Spring Use

1 oz. for 1500 plants. 6 oz. plants an acre.

A winter species of cauliflower which reaches its highest state of perfection in Western Oregon and Washington. Its cultivation and requirements are the same as cauliflower, except that it requires a little more room in the field, and that the plants are set out in July or August. The crop is ready for market during December, January and February. Use Maggotbate to prevent Root Maggots. Morcrop used freely makes healthy plants and large heads.

ST. VALENTINE—Large, firm heads of the finest quality, very early.

Pkt., 10c; Oz., \$1.25; 1/4 lb., \$3.50

LARGE WHITE FRENCH—The popular, well-known variety, medium early, very hardy.

Pkt., 10c; Oz., \$1.00 1/4 lb., \$3.00

BRUSSELS SPROUTS

The Quality Vegetable
For Winter Use

1 oz. for 2000 plants.

For fall use plant the seed half an inch deep in April and transplant in June. Set the plants 18 to 24 inches apart in the rows and allow at least 3 feet between the rows. As soon as the plants begin to crowd, the leaves should be broken off close to the stalk to give the sprouts room to develop. Only a tuft or rosette of leaves should be left at the top. For winter use the plants should be set during July and August. Frost really improves

the quality and flavor of the Sprouts, making them especially popular during the winter months. Use Maggotbate to prevent Root Maggots.

DWARF IMPROVED SPROUTS—Two inches in diameter resembling miniature cabbages.

Pkt., 10c; Oz., 30c. 1/4 lb., 90c

CABBAGE

**Make Some Sauerkraut for Winter Use
Rich in Vitamins and Minerals**

1 oz. makes 2000 plants. 6 to 8 oz. per acre.

Frequent cultivation is one of the best helps. Cabbage does not head hard in hot weather for that reason the early maturing sorts should be started early and the late varieties quite late in the spring, so as to avoid hot weather at heading time. The crop matures in 90 to 120 days.

Seed of the early varieties may be sown in seed bed in September and transplanted to cold frame to be wintered over, or may be sown in hotbed in January or February and the plants transplanted to cold frame when large enough. Plant seed one-fourth to one-half inch deep.

Seed of the second early or summer varieties should be sown in seed bed or cold frame early in April, and of the late or winter varieties in May or June. The plants will be greatly improved by transplanting once before setting out in the garden or field.

Plants of the early varieties should be set out as soon as the ground is in good condition to work. They should be set 16 to 24 inches apart in the rows and the rows should be 2½ to 3½ feet apart, according to whether to be cultivated with horse or by hand. These should be ready for use in June.

The second early varieties should be set out in May and should mature in July and August.

Late varieties, for winter use, are set out in July, 24 to 30 inches apart in rows 3 to 3½ feet apart. They mature in October or November.

Prices All Varieties Except As Noted

**Pkt., 5c; Oz., 25c; ¼ lb., 75c
Lb., \$2.25**

Early Varieties

JULY'S GOLDEN ACRE CABBAGE—One of the earliest varieties of cabbage. It resembles somewhat in shape the Copenhagen Market, but is a trifle smaller in size and is 12 to 14 days earlier. In habit of growth it is quite dwarf, very compact and produces a tightly folded head of desirable size for family use or for packing. Because of its compactness and the few leaves it may be planted 12 to 14 inches apart in the row. It is very solid, well blanched, of uniform shape and size and is what we consider an extra fine all-around variety. See Also Front Cover Collection.

**Pkt., 15c; Oz., 60c; ¼ lb., \$2.00
Lb., \$6.00**

JULY'S COPENHAGEN MARKET—A very early, round, solid-headed variety, stems are short and the plants very sturdy, heads often weigh over 10 pounds.

**Pkt., 5c; Oz., 30c; ¼ lb., 90c
Lb., \$2.75**

JULY'S EARLY JERSEY WAKEFIELD—The most popular extra early variety, heads are pointed, uniformly hard and of good quality, plants have but few outside leaves.

CHARLESTON WAKEFIELD—The heads are about one-fourth larger than Jersey Wakefield, matures 10 to 15 days later.

EARLY WINNIGSTADT—A little later than Wakefield, heads are similar in shape but larger, and very hard with leaves tightly folded.

Second Early Varieties

JULY'S GLORY—The heads are of good size, almost perfectly round, extremely solid and heavy, deliciously tender and of finest quality. A splendid keeper.

**Pkt., 5c; Oz., 30c; ¼ lb., 90c
Lb., \$2.75**

ALL SEASON OR SUCCESSION—As its name implies it is adapted for either summer, fall or winter use; large, round, slightly flattened heads, holds its "prime" a long time in the field.

EARLY FLAT DUTCH—Valuable as a second early crop, heads are flattened, compact and of good size, best quality.

Late Varieties

JULY'S DANISH BALLHEAD—Unsurpassed for winter use, medium late maturing and a splendid keeper, heads are round, medium size and very hard, a fine Kraut cabbage. **Pkt., 5c; Oz., 30c; ¼ lb., 90c
Lb., \$2.75**

LARGE LATE DRUMHEAD—The heads are large, solid and of good texture, flattened on top but very deep. Can be kept in good condition until spring, excellent shipper.

PREMIUM LATE FLAT DUTCH—A slow growing, sure heading popular late variety, large spreading outside leaves, very large flat heads, keeps well and of fine flavor.

Miscellaneous Varieties

DRUMHEAD SAVOY—A large solid heading crumpled leaved variety with the rich flavor of cauliflower. Frost improves it.

RED DUTCH—Has small heads of the finest quality for pickling, keeps good and heads are very hard, color deep purple-red.

**Pkt., 5c; Oz., 30c; ¼ lb., 90c
Lb., \$2.75**

PE TSAI—Chinese or Celery Cabbage. Heads long like Cos Lettuce, hearts blanch white and crisp, fine for salads, plant in July. **Pkt., 5c; Oz., 60c; ¼ lb., \$2.00
Lb., \$5.75**





CARROTS

**Sweet, Nutritive, Healthful
Full of Important Minerals**

Table Varieties

1 oz. for 250 feet of row. 2½ lbs. per acre.

The Carrot requires a loose, friable, warm soil, in the very best mechanical condition, this needs to be liberally fertilized with Morcrop or well-rotted stable manure. The seed should be sown one-half to one inch deep as soon as the ground is warm and dry enough, in rows 1 to 2 feet apart. As the seed germinates slowly the land should be free from weeds. Thin when large enough, to stand 2 to 3 inches apart. Ready for the table in 55 to 80 days. Careful, clean, cultivation is required, and drought must be avoided if large, succulent crops are wanted. Young carrots find a ready market all summer, and the matured roots can be stored for winter, or in mild climates can be left in the ground until wanted for use.

JULY'S GOLDEN HALF LONG—The tops are medium sized with small neck. The mature roots are thick, five and one-half to six inches in length, uniformly half long or stump rooted but tapering slightly, smooth, deep orange-red in color. The flesh is very crisp and tender. Although a medium early sort the roots are suitable for use nearly as early as any. See Also Front Cover Collection.

Pkt., 5c; Oz., 15c; ¼ lb., 45c; Lb., \$1.20

NANTES OR HALF LONG SCARLET—The roots are cylindrical, smooth and of a bright orange color. The flesh is orange, becoming yellow in the center but very tender throughout and almost coreless. This variety is of the finest quality and is one of the most symmetrical and handsome of the medium sized sorts.

Pkt., 5c; Oz., 15c; ¼ lb., 45c; Lb., \$1.20

Prices, Following Varieties

Pkt., 5c; Oz., 15c; ¼ lb., 35c Lb., 90c

EARLY SHORT HORN—Best for early use, fine for forcing, roots are short, 2 to 3 inches, tops small. They grow very quickly.


CHANTENAY OR MODEL—A stump-rooted or half-long sort, broad at the shoulder, tapers to a blunt point, fine grain, coreless, tender and medium early.

JULY'S DANVER'S HALF LONG—An especially hardy sort, popular with gardeners who grow large fields of carrots; smooth, sweet, well colored, second early.

OXHEART OR GUERANDE—Desirable in hard or shallow soils, roots are thick and short, bright orange in color, fine grained.

IMPROVED LONG ORANGE—A selected strain of the popular long-rooted type, roots are uniformly thick, tapering to a point, valuable for both table and stock, late.

STOCK CARROT—See Index.

This mark  is placed before the names of certain vegetables in this catalog to indicate that these varieties have special merit.

CAULIFLOWER

**Grow Plenty of It
in Your Next Garden**

1 oz. for 1500 plants. 6 oz. plants an acre.

The principal requirements of the crop are a high degree of soil fertility perpetual moisture with proper drainage, and protection from excess heat. Start the plants in a seed bed covering the seed ¼ to ½-inch deep and transplant while quite young to a well prepared field. Set the plants 2 to 2½ feet apart in rows 3 to 4 feet apart. Stir the soil frequently.

Select your richest land for Cauliflower, a strong loam is best, plenty of fertilizer well incorporated with the soil and the latter brought into the highest state of tilth.

Cultivation and soil should be very much the same as for cabbage. To produce perfect heads cauliflower requires a cool, moist season, 95 to 110 days are required to grow the

crop. For a spring or early summer crop sow in March or early in April, in hotbed, and transplant to a cold frame when sufficiently large, and to the open ground as soon as danger of hard freezing is over. For a late crop sow at the same time as for late cabbage and treat in the same manner. The heads should be cut for use when the "curl" is very compact or hard, as they soon become tough and bitter after they open and separate into branches. Best results will be obtained by planting either very early or very late, in order to avoid the hot midsummer season when heads are being formed. Fertilize with Morcrop Fertilizer. Use Maggotbate to prevent root maggots.

See page 9 for prices and variety descriptions

LILLY'S MORCROP

FERTILIZERS



**Made to increase your crop returns
A proven formula for each special need.**

MORCROP-K 3-10-7

A complete fertilizer for grains, berries, vegetables and root crops. Some truck crops like Lettuce, Spinach, Onions and Corn respond especially well to it.

MORCROP-X 6-10-7

A concentrated complete fertilizer, many carloads of which are used by fruit growers in the Yakima, Wenatchee and Spokane districts.

MORCROP-B 2-10-2

Another complete fertilizer, high in phosphates, lower in price, and total analysis. Valuable for grain crops and in conjunction with green manure.

and MORCROP TABLETS for Milady's Houseplants

Highly concentrated, complete fertilizer in tablet form for convenient application. Odorless, clean and quickly water soluble. The action is rapid and both foliage and bloom is improved.

MORCROP-L 5-6-8

A high nitrate complete fertilizer, relatively high also in potash, desirable because of its concentrated form. Especially useful for hops, lawns, meadows and pastures.

MORCROP-M 3-10-10

A complete fertilizer with an especially high potash content. The shipping qualities of some vegetables, berries and grapes are greatly improved by its use.

LAWN MORCROP

A scientific dressing for established lawns which produces that thrift so much desired. It discourages weeds and adds to the water-holding capacity of the soil.

LILLY'S

GARDEN HELPS

The real joy of gardening is greatly enhanced when one's crops are kept clean and thrifty. Since practically all vegetation has its natural enemies it often becomes necessary to use some sort of preparation to prevent these enemies from destroying our crops.

We offer the following meritorious preparations for controlling your garden pests.



LILLY'S TOBACCO SOAP SPRAY

For Controlling Aphis and Plant Lice

A combination of nicotine sulphate and soap emulsion prepared ready for use so that all that is necessary is to add water and apply. It is convenient for the person who has a small garden or a few shrubs, and who hasn't the required experience or doesn't want to go to the trouble of making up a preparation at home.

Spray with good pressure so the liquid is broken up into a fine mist—not drops. REMEMBER that only the aphids that you hit and wet with the solution will be destroyed.

8-Oz. BottleEach 30c
1-Qt. CanEach \$1.00

LILLY'S DUSTING SULPHUR

Sublimed Velvet Flowers of Sulphur

All of the desirable qualities of dusting sulphur are combined in this product.

It is 100 per cent pure and has great bulk or volume per pound, its fluffy, light particles always remain free running, it never cakes or hardens. Its spider-web like texture enables it to adhere not only to the upper but also to the under side of the foliage. The gas formed by the "fuming" action is often noticeable for a great distance from the treated area. Its effectiveness cannot be surpassed.

1-lb. Cartons 25c
10-lb. Cartons\$2.00

LILLY'S MAGGOTBATE

For use on Cabbage, Onion, Radish, Turnip, and all Root Crops Subject to the Ravages of Root Maggots.

A preventative of Root Maggots. Only a little is required but it must be used early (before the eggs are laid) to be successful. This article was made in response to a demand by the general public everywhere, and also as a protection on our own growing fields of Cabbage, Turnips, Onions, etc., where formerly, damage done by root maggots assumed serious proportions. Put up in two sizes.

2-lb. CartonsEach 25c
25-lb. BagsEach \$2.25

LILLY'S IMPROVED EARWIGBATE

Effective against EARWIGS, SLUGS, SNAILS and CUTWORMS

The European Earwig which has become a serious pest in some sections of the Pacific Coast can be readily controlled by the use of this improved bait.

The Government, State and City authorities, after much research and experimental work, approve and recommend this formula. The active ingredient (poison) is Paris Green which is carried on a Wheat Bran and Meat Meal base and sweetened with sugar. It is applied moist and full instructions are printed on each carton. One size only.

10-lb. Package \$1.50

LILLY'S GRAFTING WAX

The old standby of orchardists in the Northwest. Made after a special formula and packed in convenient package with instructions for use.

Quarter Pound25c Half Pound35c Pound50c

CAULIFLOWER

Highly Esteemed for Its Delicate Flavor and Extreme Tenderness

JULY'S EARLY ALBA SNOWBALL—A special strain of the popular snowball variety, large, compact heading, extra early type, a sure producer of snow-white heads of excellent flavor and quality.

Pkt., 25c; ¼ Oz., \$1.30 1 Oz., \$3.85

COMMON SNOWBALL—(Common strain). The standard early sort, heads medium size, but compact, uniform, white and nicely flavored.

Pkt., 10c; ¼ Oz., 90c; 1 Oz., \$2.65

VEITCH'S AUTUMN GIANT—A large, late variety with quite compact, white heads, known as California Wonder.

Pkt., 10c; ¼ Oz., 25c; 1 Oz., 75c

LARGE LATE ALGIERS—A valuable sure-heading sort that is popular with market gardeners, the large upright leaves protect the tender heads against frosts.

Pkt., 10c; ¼ Oz., 35c; 1 Oz., \$1.25

DANISH DRY WEATHER—Especially adapted to dry locations, but also an excellent variety for good cauliflower districts, a sure header.

Pkt., 25c; ¼ Oz., 90c; 1 Oz., \$2.65

CELERY

**Grow These Better Strains This Year
Everyone Relishes Fresh Crisp Celery**

1 oz. for 8000 plants. ¼ oz. plants an acre.

Sow the seed ½ to ¾-inch deep in hotbed, cold frame or seed bed early in spring. Transplanting once or twice before setting the plants in the garden will be very beneficial. The tops should be clipped off to induce stockiness, and when transplanting, the ends of the roots should be cut off.

Celery requires a deep, very rich, moist soil, and 120 to 150 days to mature.

The plants may be set in the garden after some early harvested crop has been removed. They should be set six inches apart in rows three feet apart.

There are several ways of blanching the plants, but the favorite method is with boards. When the plants are a little more than a foot high, set twelve-inch boards on edge close to the plants on both sides of the row. A few of the leaves will show above the boards. The foliage will soon fill the space, excluding the light, and the stalks will be blanched in ten to twenty days.

If the plants are blanched with earth, care must be taken that the crowns do not become filled.

Celery may be kept for winter use by banking with earth, or it may be dug and removed to a cellar, cold frame, vacant hotbed, or pit, and reset close together with the roots bedded in earth. While in storage it should be kept as cool as possible without freezing.

The seed is slow to germinate and the seed bed must be in perfect condition.

Fertilize freely with Morcrop.

JULY'S SILVER PLUME—Early, attractive in appearance, blanches quickly, medium in size, hearts are pure white, brittle, free from stringiness and of fine flavor.

Pkt., 10c; Oz., 35c; ¼ lb., \$1.20

PARIS GOLDEN YELLOW—Semi-dwarf, has numerous stalks, heavily ribbed, of golden yellow color, very crisp and tender, very early and practically self blanching.

Pkt., 10c; Oz., \$1.00 ¼ lb., \$2.75

GOLDEN SELF BLANCHING—The standard early self-blanching, leaves yellow, easy to grow.

Pkt., 10c; Oz., 50c; ¼ lb., \$1.50

GIANT WHITE SOLID WINTER—Unequaled as a late or winter celery, requires blanching with earth or boards, grows very tall, on the Coast can be left in the garden until wanted; white, brittle and fine flavored.

Pkt., 10c; Oz., 30c; ¼ lb., 90c

The most important fact for the farmer and gardener to know and remember in connection with fertilizer is that one element cannot replace another. Nitrogen, Phosphoric Acid and Potash are each required in certain proportions and lack of any one of them limits the producing power of the others.

JULY'S MORCROP Fertilizer contains the three necessary elements and is properly balanced.



IF YOU WOULD HAVE HEALTH

Grow These Salad Plants Plentifully This Season

Celeriac

1 oz. for
400 feet of row.

An off-shoot of the Celery species, producing an edible root, instead of edible stalks.

In general culture is the same as for celery. In the garden the rows should be two feet apart and the plants six to eight inches apart. Aside from frequent tillage, Celeriac requires but little attention. The principal use of Celeriac is for flavoring soups and stews, but it is also served in several ways.

Pkt., 10c; Oz., 35c; $\frac{1}{4}$ lb., \$1.20

Chervil

1 oz. for 250 feet
of row.

The cultivation of Curled or Salad Chervil presents no difficulties except that the seed starts slowly. Plant and cultivate like spinach. The leaves are ready to use in six to ten weeks from planting and any good garden soil is congenial. It thrives best during the cooler months of the year and likes moisture. The leaves are very aromatic and are used like parsley, which they resemble.

Pkt., 10c; Oz., 30c; $\frac{1}{4}$ lb., 90c

Chicory

1 oz. for 200 feet
of row.

Used principally as a potherb, a salad plant, and as an adulterant of coffee. Succeeds where other rootcrops thrive and requires practically the same cultural attention as carrots and parsnips.

Pkt., 10c; Oz., 25c $\frac{1}{4}$ lb., 80c

Chives

1 oz. for 250 feet
of row.

An onion-like plant used as a salad and for flavoring soups. It also makes an excellent ornamental garden bed edging which may frequently be cut, a new growth of leaves appearing soon after each cutting. The plants grow about ten inches high. One sowing will answer for about three years. Plant $\frac{1}{2}$ -inch deep in thin rows.

Pkt., 10c; Oz., \$1.00 $\frac{1}{4}$ lb., \$3.00

Collard

1 oz.
for 2000 plants.

A non-heading form of cabbage grown extensively in the south for greens. Not adapted to the north. Planted and handled the same as cabbage.

Pkt., 10c; Oz., 25c $\frac{1}{4}$ lb., 75c

Corn Salad

1 oz. for 250 feet
of row.

Know also as Lambs Lettuce, it is a native of Europe. Sow the seed in October or November like winter spinach or very early in the spring like lettuce. Likes an abundance of water, and light, rich, well worked soil. Matures in 60 to 65 days during growing weather and makes a mild salad (best when blanched), or can be used as a potherb like spinach.

Pkt., 10c; Oz., 30c; $\frac{1}{4}$ lb., 90c

Cress

1 oz. for 50 feet
of row.

(or Pepper Grass)

Its leaves have the pleasant pungency of Water Cress, and may be used more freely as a condiment, to be served with salads, or for garnishing. The seed sprouts very quickly and can be planted very early in the spring. It can be cut repeatedly but for best results frequent plantings should be made. Any good garden soil will do. Plant broadcast in beds or in narrow rows, cover seed $\frac{1}{4}$ to $\frac{3}{8}$ -inch, thin to 4 inches apart.

Pkt., 10c; Oz., 20c; $\frac{1}{4}$ lb., 45c

Water Cress

1 oz. for
100 ft.

Its medicinal properties have made it a favorite salad plant for ages. Easily grown along ditches, pools and streams, by scattering the seed along the water's edge and covering lightly. Plants can be started in a well-watered trench in the garden and transplanted. Can be grown to maturity in tubs if covered with water which is changed frequently.

We offer a distinctive variety of cress with small oval leaves, which are used for salad.

Pkt., 10c; $\frac{1}{4}$ Oz., 30c; Oz., 90c

Dill

1 oz. for
250 ft. of row.

The seeds have an aromatic odor and warm, pungent taste. They are used as a condiment and also for pickling cucumbers.

Pkt., 10c; Oz., 20c; $\frac{1}{4}$ lb., 50c
Lb., \$1.50

Endive

1 oz. for
300 feet of row.

A fall and winter salad plant much relished by those who know it. Plants are started in beds in June, seed is covered half an inch. Transplanting is done in July or August, twelve inches apart in rows 18 or 20 inches apart, and when plants have reached full development they are blanched, this takes two to four weeks. Blanching is easily done by inclining two boards over the row.

BATAVIAN BROAD LEAVED — The leaves are broad, twisted and waved, deep green, with thick, white midribs. The inner leaves form a clustering head which blanches to a beautiful creamy white and is crisp and tender.

Pkt., 10c; Oz., 20c; $\frac{1}{4}$ lb., 45c

GREEN CURLED ENDIVE—A hardy, vigorous variety, bright, deep green leaves usually tinged with rose, blanching to a deep cream color.

Pkt., 10c; Oz., 20c; $\frac{1}{4}$ lb., 45c

SWEET CORN

Easy to Grow—Yields Heavily
Only the Home Grown Is Really Sweet

Table Varieties

1 lb. plants, 100 hills or 300 feet of row in drills. 12-15 lbs. per acre.

About April 15th to 20th is considered safe planting time for sweet corn, although earlier planting is well worth a trial for a portion of the crop.

Corn requires a rich, well prepared seed bed. Ten to fifteen sacks of Mordcrop per acre is a profitable investment. Work it in to the topsoil before planting. Plant the seed in drills three feet apart and thin to a single stalk every foot in the rows, or five or six kernels may be planted in hills, three feet apart each way, and thinned to three plants in each hill. Cultivation should be for the purpose of conserving the soil moisture, as well as to kill weeds, and should be frequent. Corn develops an extensive, shallow, root system for which reason it is necessary to make each succeeding cultivation shallower than the last, to avoid damaging the root system toward the latter part of the season. Keep the surface covered with a dust mulch and you have an ideal growing condition for corn. Do not allow the suckers (side shoots) to develop if you want large uniform ears.

Prices All Varieties

Pkt., 15c; 1/2 lb., 20c; 1 lb., 35c;
10 lbs., \$3.00

JILLY'S GOLDEN BANTAM — Very early, sweet and delicious, the ears are short but thickly set with plump, creamy yellow kernels which turn golden as it ripens, very popular. Golden Bantam is extra early and plantings can be made a week or ten days earlier than with the less hardy varieties of White Sweet Corn.

GOLDEN GIANT—Produces large ears of very sweet, tender, deep golden corn, the flavor is wonderful and the yield large, should be grown in every garden.

JILLY'S STOWELL'S EVERGREEN—An old favorite late, white variety, ears are large, kernels tender and sugary and remains a long time in condition for table use. The stalks grow about seven feet high and are very productive.

EARLY EVERGREEN—Has ears fully as large as those of Stowell's and is about five days earlier. Noted for the extreme paper whiteness of the grains. It retains its whiteness when put up in cans.

PEEP O' DAY—One of the very earliest varieties. The ears are about five inches long, the kernels large, white and tender. The stalks are dwarf, only about four feet high, and usually bear two ears each.

EARLY WHITE COB CORY—A very early sweet corn. The plants are dwarf, and usually bear two ears each. The ears are six to seven inches long, and the kernels are milky white, sweet and of good quality.

JACK FROST—The earliest white sweet corn especially adapted to Northwest conditions, kernels are large, of delicate flavor and melting tenderness, remains tender a long time.

COUNTRY GENTLEMEN — A splendid late variety, the cob is small but densely crowded with irregular rows of deep, slender white kernels of excellent quality.

EARLY MINNESOTA—A standard second early variety of white corn, kernels are broad, sweet and tender, ears long and thickly set with ten or twelve rows of kernels.

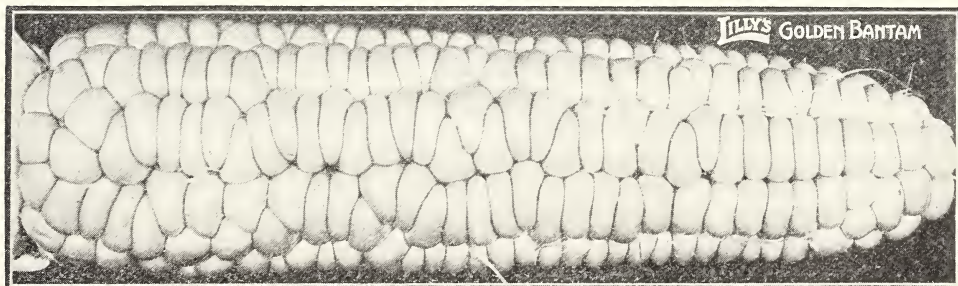
GREEN CORN

Green corn, a typical American food product, is a vegetable which, for most palates, is easily spoiled by overcooking, since the longer the cooking period the less pronounced the delicate corn flavor.

Boiled Corn on the Cob

The most satisfactory way to serve green corn is on the cob. Free the corn from husks and "silk." Have a kettle of water boiling hard, drop the corn into the water and cook ten minutes. If only a few ears of corn are put in a kettle of boiling water, the temperature of the water is not lowered greatly and the corn will cook in eight minutes. On the other hand, if a large quantity of corn is crowded into a kettle of boiling water, the temperature is very much lowered and the time of cooking must be increased. When possible, surround the corn with a generous quantity of boiling water.

CORN—Field Varieties. See Index.



CUCUMBERS

**Dodge High Vegetable Prices
Grow All You Want At Home**

1 oz. plants 100 hills. 2 to 3 lbs. per acre.

Cucumber plants are very tender, will not endure frost or chilly weather, and should not be planted out of doors until late in spring after the weather is thoroughly settled and the soil is warm. They require a light, rich, warm, porous soil, very heavily fertilized, and they must be forced in every way possible. The plants may be started in berry boxes or in inverted pieces of sod, or in the hotbed, planting a half dozen or more seeds in each box or sod the latter part of April. By the time that they should be planted out of doors they will have attained a height of eight or ten inches and will be about ready to vine. Set in the garden a little deeper than they stood in the boxes, removing the boxes without disturbing the soil around the roots. Fertilize generously with Morcrop to hasten the time of fruiting. After danger from beetles is past thin to three plants to the hill.

There are many methods of planting. Some plant in hills six feet apart each way; others plant in hills six by two or three feet, and others in drills six feet apart; thinning the plants to one foot apart in the rows. We prefer the latter method. A row of beans or peas may be planted between each two rows of cucumbers. They will protect the cucumbers and will be removed before the space is required by them. The seed should be planted about one inch deep and the crop requires 50 to 75 days to mature.

Pick all of the cucumbers before they begin to mature, for as soon as the vines begin to mature fruit they cease to produce.

Prices All Varieties Except as Noted

Pkt., 5c; Oz., 15c; ¼ lb., 40c;
Lb., \$1.25

JULY'S PRIDE OF THE PACIFIC—A highly improved strain of the White Spine family, brought to its present state of perfection by the most careful methods of selection and cultivation. The hardy, vigorous vines produce immense crops of

smooth, rich, deep green fruit, large, symmetrical and very uniform. It is ideal for slicing, the flesh being sparkling white, crisp, tender, and of a delicious flavor.

Pkt., 5c; Oz., 20c; ¼ lb., 65c;
Lb., \$2.00

DAVIS PERFECT—Large and uniform in shape, the numerous fruits are smooth and well colored, the flesh for quality and flavor is hard to beat.

JULY'S LONG GREEN—The fruits are long, firm and crisp; excellent for slicing, or when small they are good for pickling. The vines are sturdy and very productive. The fruits are uniform in size and shape, slender, often a foot long, and very dark green. The best variety for sweet pickles.

WHITE SPINE—One of the best sorts for table use, an early vigorous cropper, fruit is covered with fine white spines, flesh of excellent flavor and quality.

Pickling Varieties

JULY'S BOSTON PICKLING—A very productive variety; extensively grown for pickles. The fruits are bright green, of medium size, smooth and symmetrical. The flesh is crisp and tender.

EARLY FRAME—Also called "Short Green" is an early, bright cucumber of medium size, used for both pickling and slicing, very productive.

LEMON CUCUMBER—Shape and color resembles a lemon, has distinctive flavor and lacks the bitterness common to the cucumber.

Pkt., 5c; Oz., 20c; ¼ lb., 60c;
Lb., \$1.75

IMPROVED TELEGRAPH—A special variety for frame or greenhouse culture, smooth fruits 18 to 20 inches long, deep color; three or four are produced at each joint, highest quality flesh which remains stiff after cutting.

Special Price, per Packet, 25c



Use
Morcrop
Fertilizer

EGG PLANT Good Ones Not Hard to Grow On Rich Soil in Hot Weather Sections

1 oz. for 1500-2000 plants. 4 oz. plants
an acre.

This curious, but valuable vegetable has always been considered a plant for the tropics or at least only the warmer sections of the United States. They thrive in certain parts of the Pacific Northwest and require the same cultural attention as tomatoes. The soil should be rich, warm and mellow. Nothing is to be gained by pruning the plants.

NEW YORK IMPROVED—Very productive; the fruits are large, nearly round, dark purple, free of thorns and of excellent quality.

Pkt., 10c; Oz., 70c; ¼ lb., \$2.35

BLACK PEKIN—An early variety with fruits nearly as large as the later sorts. The fruit is nearly round, the skin smooth, black and glossy.

Pkt., 10c; Oz., 70c; ¼ lb., \$2.35

KOHL RABI Everyone Likes Variety in Foods Grow Some Kohl Rabi, They're Fine

1 oz. for 300 feet of row. 2 to 3 lbs. for an acre.

The edible portion is the peculiar swollen stem just above the ground. The plant belongs to the cabbage family, but the vegetable resembles a turnip and like turnip should be used while young and tender. Plant half an inch deep in rows 16 to 24 inches apart and thin to 6 or 8 inches apart in the row. If wanted for winter use they

should be planted in August. Can be stored like turnip. They grow best in cool weather, and in soil that has been enriched with Mordrop.

EARLY WHITE VIENNA—Combining somewhat the flavor of turnips and cabbage. Large enough to be used in ten or twelve weeks from time of sowing.

Pkt., 10c; Oz., 25c; ¼ lb., 75c

HERBS For Endless Culinary Uses Why Not Grow Your Own Seasonings

Grown for their medicinal, aromatic and seasoning qualities and for garnishing. Only the most easy to grow are listed. They are to be started from seed planted ¼ to ½-inch deep, in the spring as soon as the ground is warm. The varieties marked (*) are perennials and are hardy in this climate, while the others are annuals and are planted each year. Give them plenty of room in the garden.

ANISE—Used for flavoring and garnishing.

Pkt., 10c; Oz., 40c

CARAWAY—Seed used for flavoring, oil for medicine.

Pkt., 10c; Oz., 50c

***CATNIP**—Leaves used for seasoning, good bee pasture.

Pkt., 10c; Oz., \$1.25

***DILL**—Flavoring pickles and medicinal tea.

Pkt., 10c; Oz., 20c; ¼ lb., 50c
Lb., \$1.50

***HOREHOUND**—Seasoning and lung medicine.

Pkt., 10c; Oz., 40c

***LAVENDER**—Leaves for seasoning, flowers for perfume.

Pkt., 10c; Oz., 65c

***ROSEMARY**—Leaves for seasoning, tea and oil for medicine.

Pkt., 10c; Oz., 75c

SAGE—Leaves used for seasoning dressings.

Pkt., 10c; Oz., 85c

SUMMER SAVORY—Leaves and flowers for flavoring.

Pkt., 10c; Oz., 65c

SWEET BASIL—Seeds and stems used for flavoring soups and sauces.

Pkt., 10c; Oz., 30c

SWEET FENNEL—Leaves for fish sauces, tea for colic.

Pkt., 10c; Oz., 30c

SWEET MARJORAM—Leaves and shoots for seasoning.

Pkt., 10c; Oz., 80c

TANSY—Used to season puddings and for medicine.

Pkt., 10c; Oz., 75c

***THYME**—Leaves for seasoning, tea for headaches.

Pkt., 10c; Oz., 90c

WORMWOOD—Used to flavor liquors, and for medicine.

Pkt., 10c; Oz., 75c

KALE

The "Greens" of the Epicurean Grow Some for Fall and Winter Use

Grown for supplying greens during the fall, winter and spring; also used for garnishing. Of all the cabbage family this is the most tender and delicious. For winter use, sow in September in drills eighteen inches apart, covering the seed one inch deep, and thin to twelve inches apart in the rows. The young plants which are thinned out, may be used for greens like spinach. Plants are hardy and are left in the ground until wanted for use. Frost improves the quality. For summer use plant early in spring. The soil should be very rich.

Fertilize well with Morcrop and cultivate and handle like cabbage.

Prices All Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 45c;
Lb., \$1.35

1 oz. for 2000 plants. 6-8 oz. plants an acre.

JILLY'S EMERALD ISLE—A grand, finely curled, winter variety, 2 1/2 feet tall, improved by frost.

TALL SCOTCH—Grows four feet high, large, plume-like green leaves, deeply cut, fine curled edges.

JILLY'S DWARF GREEN—Vigorous, dwarf, spreading habit, large bluish leaves with frilled edges.

THOUSAND HEADED KALE—See Index.

MARROW KALE—See Index.

LEEK

Easily Grown From Seed

1 oz. to 150 feet of row. 5-6 lbs. for an acre.

The seed is usually sown in the bottom of a trench and covered 1/4 to 1/2 inch, and after thinning the plants are hilled up as they grow. A thick fleshy stem is formed which should be blanched with earth before using. It belongs to the onion family, but does not form a true bulb, however, the stem is uniformly thick throughout, culture otherwise is the same as for onions. Can be stored for winter use like celery.

MUSSELBURG—An improved variety growing to a very large size, with broad leaves spreading like a fan.

Pkt., 10c; Oz., 25c; 1/4 lb., 75c

AMERICAN FLAG—Large, sweet and very popular with gardeners.

Pkt., 10c; Oz., 25c; 1/4 lb., 75c

LETTUCE

Non-Heading Varieties

1 oz. plants 600 feet of row. 4 lbs. plants an acre.

The non-heading type of lettuce is useful principally because it is hardy enough to be planted very early in the spring. It grows

For Healthful Greens Quickly
Gives Zest to Every Meal

rapidly, maturing in 40 to 60 days, and requires no special care. If cut above the crown it will come again, and therefore, provides an enormous quantity of delicious, tender greens before the weather is warm enough for other vegetables. Usually sown 1/4 to 1/2-inch deep in drills or beds where it is to remain.

Prices All Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 50c; Lb., \$1.40

JILLY'S GRAND RAPIDS—Quick growing and stands shipping well, popular for green-house forcing.

EARLY CURLED SIMPSON—Light green leaves muchly curled and blistered, crisp and sweet.

JILLY'S FORCING—Quick growing, crimped, light green leaves, excellent forcer, early outdoors.

PRIZEHEAD—Large clustering, savoyed leaves, tinged with red, crisp, tender and sweet.

CHICKEN LETTUCE—See Index.

HEAD LETTUCE

Grow It for Everyday Use
Peps the Appetite—Creates Health

Heading Varieties

1 oz. for 3000 plants. 1 lb. plants an acre.

For early crop sow the seed $\frac{1}{4}$ to $\frac{1}{2}$ -inch deep in hotbed in February or early March. Transplant the seedlings to cold frames or flats, and when the ground is warm enough transplant to the garden in rows a foot apart and eight to twelve inches apart in the rows.

For general crop, sow when ground is in good condition to work in spring in rows a foot apart and thin the plants to six or eight inches apart. For succession sow at intervals of two or three weeks. The plants which are thinned out may be transplanted to other rows.

Some use only a part of the leaves from the plants, allowing the plants to continue to grow; or allow them to grow thickly in the rows and thin as wanted for use; but it is much better to thin the plants when they are small, allow them to form heads, and use the entire heads.

Head Lettuce does best in the cool weather in spring and fall, and requires from 70 to 90 days to mature. That grown during the hot weather in summer should be protected from the sun, or planted in the shade of some taller crop. It is best when grown quickly, and Lilly's Morcrop is the favorite fertilizer for lettuce in the growing sections. A rich, warm, sandy loam soil is best.

LILLY'S NEW YORK OR WONDERFUL—A crisp, cabbage-heading lettuce, extremely large, sometimes fifteen inches in diameter and weighing two or three pounds. It is a sure header under the most trying conditions. The interior is beautifully blanched, creamy white, crisp, tender and delicious. Especially recommended as a standard main crop lettuce. Very popular with market gardeners, and is equally good for home use. Grown exclusively by shippers. This is the famous "Seattle Strain".

Pkt., 5c; Oz., 30c; $\frac{1}{4}$ lb., 90c;
Lb., \$2.75

MUSTARD

1 oz. for 600 feet or row.

As a culinary vegetable, Mustard is used mostly for greens for which purpose the large, succulent, basal leaves are used. These develop best in the early spring and during cool fall weather. Any rich garden soil is suitable for its culture.

Prices Both Varieties

Pkt., 5c; Oz., 15c;
 $\frac{1}{4}$ lb., 35c; Lb., 90c

SOUTHERN CURLED—Large, crimped, light green leaves, hardy and vigorous.

WHITE ENGLISH—Dark green, small, smooth leaves deeply cut, mild and tender.

LOS ANGELES—Outer leaves are large, numerous and well curled, heads are creamy white, crisp, tender and delicious.

Pkt., 5c; Oz., 30c; $\frac{1}{4}$ lb., 90c;
Lb., \$2.75

ICEBERG—A decidedly crisp variety, spreading leaves, but hard curled heads, fine flavor.

Pkt., 5c; Oz., 30c; $\frac{1}{4}$ lb., 90c;
Lb., \$2.75

Prices All Other Varieties

Pkt., 5c; Oz., 20c; $\frac{1}{4}$ Lb., 60c
Lb., \$1.75

MAY KING—Withstands cold, damp weather, heads early, and of fine quality.

NONPAREIL HANSON—A late, large, compact, cabbage-like heading sort that is very popular.

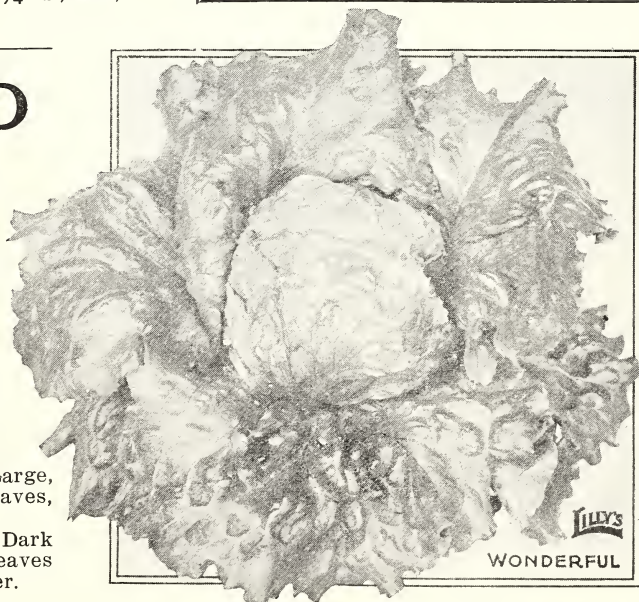
PARIS WHITE COS—A Romaine type of head lettuce, heads are tall and tightly folded.

DELICIOUS—Very early, compact heads, fine quality and flavor, leaves yellowish green.

FERTILIZE FOR RESULTS

When fertilizing the soil do not lose sight of the immense area of an acre. An acre contains 160 square rods or 43,560 sq. ft. To apply 400 lbs. of fertilizer to an acre allows only $2\frac{1}{2}$ pounds to the square rod, a most insignificant amount. A thousand pounds per acre is a little more than 6 pound to the rod. Why not farm fewer acres, feed them well and make more net profit.

Use MORCROP Fertilizer



MUSKMELONS or Cantaloupe

Full of Rich Spicy Nectar-Sweetness

1 oz. for 40-50 hills. 2-5 lbs. per acre.

The muskmelon is a long season crop, and when grown west of the Cascade Mountains conditions must be favorable and they must be encouraged in every way possible to insure success. The soil must be a warm, sandy loam with an abundance of well-rotted manure and commercial fertilizers.

For an early crop, or for main crop in other than the most favorable localities, the plants should be started in berry boxes or on inverted sods.

In warmer localities the seed may be planted one inch deep when weather is settled and the soil is thoroughly warmed in spring, in hills six feet apart each way, eight or ten seeds in each hill and thinned to four plants to the hill. Or the seed may be sown in drills and the plants thinned to eighteen to twenty-four inches apart when they have become thoroughly established. Rows of short season crops may be planted between the rows of muskmelons as they require 90 to 150 days to mature.

Prices All Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 40c;
Lb., \$1.25

LILLY'S BURRELS GEM—Dark green with thin, tough rind, well arched ribs, covered with closely interlaced gray netting; about 4 1/2 inches in diameter by 6 inches long, flesh of reddish orange, very thick, fine grained and spicy, seed held firmly in triangular cavity. This is a delicious variety.

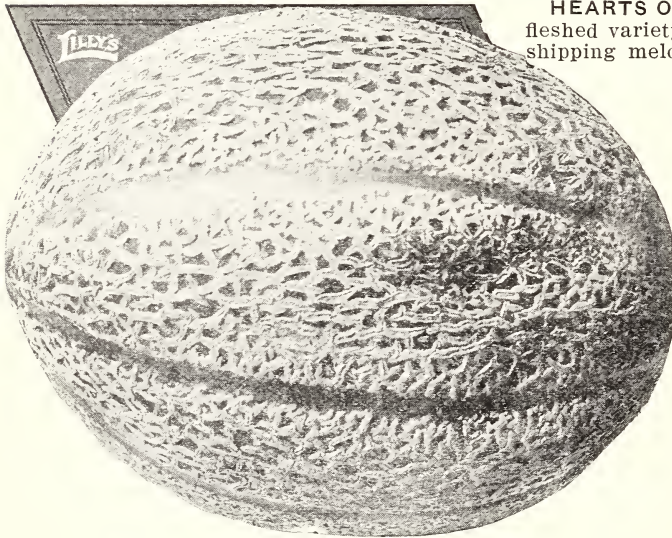
POLLOCK 10-25—Early, closely netted, very small seed cavity, thick luscious flesh of salmon tint, excellent shipper and big yielder.

IMPROVED ROCKY FORD—Small oval shaped fruits, flesh green and thick, rind thin, netted yellow.

EXTRA EARLY HACKENSACK—Quite large round fruit, deeply ribbed and netted, flesh pale green.

OSAGE or MILLER'S CREAM—Medium early, smooth skinned, deeply ribbed, flesh orange colored and very thick.

HEARTS OF GOLD—This is an orange fleshed variety of medium size, ideal as a shipping melon and a desirable mid-season sort for the home garden.



CASABA

1 oz. plants about 40 hills.

Seed may be planted in April or May. Cultivate same as other musk melons but do not water too freely after first setting of fruit is fully grown. The fruits may be picked when the light streaks have become quite yellow. Store the fruits so they do not touch each other, in a cool dark place. When the rind becomes slightly softened and moist, they are ready to cut.

Prices All Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 40c;

LILLY'S HONEY DEW—The skin is smooth with an occasional net and when fruits are ripe is creamy yellow in color. Flesh light emerald green, fine grained and of very sweet, sugary flavor. Rind thin but very firm and the fruits stand shipping remarkably well. If picked shortly before fully mature the fruits will keep for several weeks.

GOLDEN BEAUTY—The fruits are nearly globular, bright yellow with golden tint, with wrinkled skin, six to eight inches in diameter. The flesh is white, very thick, juicy and sweet.

It costs you nothing to get the protection that is sealed in each package of Lilly's Verified Seeds from the North. Replacement free if you should be dissatisfied.

WATERMELONS

What Can Be More Refreshing
Than a Cold Ripe Watermelon

1 oz. for 20-25 hills. 4-5 lbs. plants an acre.

The cultivation of the watermelon is practically the same as for the muskmelon, except that the plants grow larger and require more room. They require 100 to 160 days to ripen. They should be set in hills ten feet apart each way, or in drills ten feet apart and the plants thinned to three feet apart in the rows.

JULY'S KING AND QUEEN—Black seeded Ice Cream). The fruit is of uniform medium size; round, smooth and of fine appearance. It is very early and yields prodigiously. The flesh is a beautiful bright red, crisp and of delicate texture, granulated, cool and sparkling. It has very few seeds, the heart is solid, and the fine quality is sustained clear to the rind.

Pkt., 5c; Oz., 20c; ¼ lb., 50c;
Lb., \$1.50

Prices Following Varieties

Pkt., 5c; Oz., 15c; ¼ lb., 40c;
Lb., \$1.25

JULY'S KLECKLEY'S SWEET—An excellent variety for home use, but the rind is too thin to stand shipping long distance. It is of medium size; oval; dark green, slightly mottled. The flesh is bright red and exceedingly sweet.

GEORGIA RATTLESNAKE—Very large and long, skin striped and blotched, flesh bright scarlet.

SWEET AS HONEY—Early, oblong, dark green, bright scarlet flesh, clear to the skin, solid core.

FLORIDA FAVORITE—Very large, dark green fruits, skin mottled, flesh deep red, seed white.

TOM WATSON—The best shipper and maincrop melon, flesh rich red, seed white, skin dark green.

KLONDYKE—Although having a very thin rind it is a better shipper because it does not wilt.

CITRON MELON

1 oz. plants 25 hills.

Used exclusively for preserves and pickles. Grown the same as watermelon.

RED SEEDED—Small round fruits distinctly striped and mottled, flesh white, late.

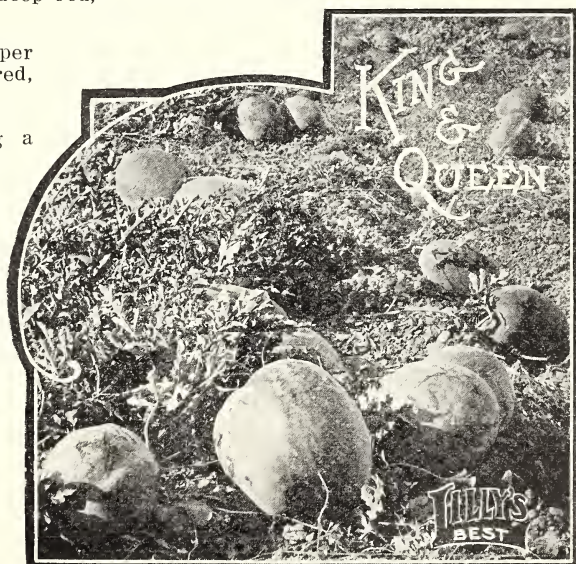
Pkt., 5c Oz., 15c ¼ lb., 40c
Lb., \$1.25

You Should Know

It is interesting to know that a good garden will reduce your grocery bill one-third, and that vegetables are necessary in the human food supply. If you want fascinating pastime, health-giving exercise, and that happiness that comes with accomplishment—make a garden. Begin today and every hour spent in your garden will show you something new, something more interesting, something that will help you to enjoy living.

The wide-awake gardener begins sowing as early in spring as possible, and sows succession crops throughout the summer and until late in the fall. Succession crops are most important since they provide fresh vegetables for fall and winter use. A cellar full of stored vegetables is a good investment. Grow all the vegetables your garden can produce, eat them fresh, evaporate them, can them, store them, and be independent of high food prices.

World-famous scientists have discovered by actual laboratory tests that many diseases, like rheumatism, gout, nervous troubles, etc., originate from the collection of poisonous germs in the intestines. These famous physicians have pointed out that the way to avoid this condition is to use salads, such as chicory, collards, cabbage, lettuce, spinach, etc., plentifully. Europeans have known this for years. The French call spinach "the broom of the stomach." If you would have health, grow salad plants plentifully, and use some form of salad vegetable every day.



MUSHROOMS

There is nothing mysterious about mushroom culture. Well prepared beds, good spawn, properly controlled moisture and ventilation are the only essentials for indoor culture. The average cellar provides the last three of these. The temperature should be between 53 degrees F. and 60 degrees F., but can be as high as 75 degrees F., at spawning time; after that cold is less injurious than heat. Horse manure composted with straw is the best material for beds. Break the bricks of commercial spawn into eight to ten pieces, place these a foot apart and two inches below the surface; after ten days case the bed by covering with one inch of screened loam (not clay or sand). The mushrooms should appear in five to ten weeks and the period of production lasts about three months. Keep the cellar moist by sprinkling the walls; if necessary to water the bed do so after picking. Ventilation should be gradual, as direct draughts are harmful.

A special leaflet on mushroom culture free.

LAMBERT'S PURE CULTURE MUSHROOM SPAWN is produced by a new system of selection and inoculation. The pure cultures are taken direct from selected specimens and produce mushrooms of the finest quality of uniform variety and color. In bricks weighing about one and one-quarter pounds. One brick is sufficient to spawn ten square feet of bed.

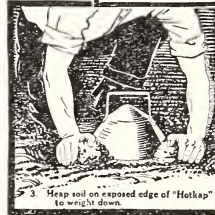
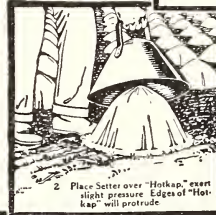
Brick, 40c; 5 Bricks, \$1.75



Easy to Grow If You Use
Lambert's Pure Culture Spawn

“Hotkaps”

Besides protecting the plant from the elements, and from insects, “Hotkaps” are worth their cost alone because they are miniature hot-houses and make crops mature earlier.



“HOTKAPS” are made of a specially prepared waxed paper and are cone-like in shape, measuring about 11 inches in diameter at the base and coming to a point at the top.



They protect plants from frost, hail and cold rains and keep the soil warm, maturing the crop in time to get the high prices.

OKRA or Gumbo

1 oz. for 75 feet of row.

Introduced into the United States from Africa, and cultivated for its fruit pods, which are used in soups, catsup, stews, etc. It gives body to these dishes, and imparts a peculiar flavor, a taste for which, however, is easily acquired by most people. Plant the seed ½-inch deep. The plants are not easily transplanted and should be started in pots to facilitate moving. Set two to three feet apart in good warm garden soil and keep the pods picked off clean if continuous production is wanted.

DWARF GREEN produces long green pods abundantly, very tender while young.

Pkt., 10c; Oz., 20c; ¼ lb., 40c;
Lb., \$1.25

Packed 1000 to a roll

Per 100, \$1.35;	Per 1000, \$11.50
5 rolls at \$11.00;	10 rolls at \$10.85
25 rolls at \$10.75;	50 rolls at \$10.60
100 rolls at \$10.50;	Setters ea., \$2.50

ONION SETS

1 lb. plants 50 feet of row. 250 lbs. for an acre.

Lilly's Onion Sets are northern grown, hardy, handsome, small and of uniform size and have proven to give best results in our section. Plant two to three inches deep in rows a foot apart spacing them one to two inches apart in the row.

Brown Sets, Pound, 15c;	10 lbs., \$1.25
White Sets, Pound, 20c;	10 lbs., \$1.75

ONIONS

Grow Plenty of Them Yourself
Require Little Space—Keep All Winter

1 oz. for 200 feet of row. 4-5 lbs. plants
an acre.

For dried onions, seed is sown, and it requires a rich, well-drained loam. No other soil should be used if it can possibly be avoided. The land should be very rich and it is absolutely necessary that it should have raised a hoed crop the previous season. It is a mistake to attempt to grow onions on weedy or rundown land. To get the best results a heavy top dressing of well-rotted barnyard manure should be well worked into the soil. After this Morcrop Fertilizer containing a large proportion of potash should be used. This should be sown broadcast at the rate of 1,000 pounds per acre.

The cost of growing and cultivating onions is very high and it must be borne in mind that it costs no more to cultivate a crop that yields 800 bushels per acre than it does to cultivate a crop that yields only 300 bushels. When land is in good condition onions may be grown on it from year to year. Seed should be sown half an inch deep as early in the spring as the land can be worked. If intended for hand cultivation, sow in rows 12 to 14 inches apart, and if for horse cultivation about 30 inches apart. It requires 125 to 150 days to grow the crop.

For those who intend raising many onions it will be money well spent to get one of the many good books published in reference to the production of this crop. It will pay to buy the best seed and from reliable sources, as onion seed loses its vitality after the first year.

Prices Following Varieties

Pkt., 5c; Oz., 25c; ¼ lb., 80c;
Lb., \$2.35

JULY'S PRIZETAKER—It attains its immense size under exactly the same conditions necessary to cultivate other sorts.

It is a bright, clear straw color; always grows to a uniform and most perfect shape. The bulb is very solid and heavy. The flesh is crisp, white and of delicious quality. It is very hardy and a good winter keeper, as it ripens up hard and firm. It is very fine-grained and of mild, delicate flavor.

Buying
Verified
Seeds
from the
North
is real
protection.

JULY'S YELLOW GLOBE DANVERS — A very popular variety, especially for market. It is globular in form; very solid and one of the best shippers. The skin is brownish yellow and the flesh is fine-grained, creamy white, crisp, mild and of excellent flavor. One of the best main crop varieties.

LONGKEEPER — Marvelous keeping qualities, globe shaped, yellow skin, mild flavor, medium size.

LARGE RED WETHERSFIELD — Very large, flattened bulb, purplish red skin, purple tinged white flesh, strong flavored, keeps well.

AUSTRALIAN BROWN—Early, medium size, almost round, good keeper, brown skin, mild.

Prices White Varieties

Pkt., 5c; Oz., 30c; ¼ lb., \$1.05;
Lb., \$3.00

JULY'S WHITE PORTUGAL—A very popular medium white onion, much used for green onions, pickles and for fall and winter planting. The bulbs grow to good size, ripening early and quite evenly, are silvery white, nearly round when of bunching size, but flattened when mature. The flesh is mild and of splendid quality.

WHITE QUEEN—Small, best for pickles and green onions, very crisp, waxy white, mild.

SOUTHPORT WHITE GLOBE—Mild flavored, fine grained, crisp, large, snowy white in color.

BUNCHING ONION—A special white sort, fine for early green onions.

YELLOW BERMUDA—Medium size, crisp and waxy, mild. Pkt., 5c; Oz., 35c; ¼ lb., \$1.20; Lb., \$3.50

SWEET SPANISH—Enormously large and exceptionally mild flavored, much used for sandwiches, skin pale yellow, flesh waxy white.

Pkt.,
20c;

Oz.,
60c

¼ lb.,
\$1.90;

Lb.,
\$5.75



JULY'S

PARSNIPS

Plant Lots of This Delicious Vegetable for Winter and Spring Use

1 oz. for 300 feet of row. 4-6 lbs. plants an acre

The best soil for Parsnips is a deep, clean, rich loam, which offers no obstruction to the uniform expansion of the roots. Prepare it the same as for beets or carrots. Sow the seed quite early in the spring one-half to one inch deep, in rows 15 to 20 inches apart, thinning the plants to three inches as soon as large enough, and cultivate frequently until the plants are sufficiently developed so that the foliage shades the soil, and stops weed growth. They are ready for the table in from 120 to 150 days. The roots may remain in the ground until wanted for use during the winter. They are improved by freezing.

Prices All Varieties

Pkt., 5c; Oz., 15c; ¼ lb., 35c; lb., \$1.00

JULY'S HOLLOW CROWN—A standard and excellent variety. The roots are long, with smooth, white skin, uniform in shape, tender and of good quality. This variety is distinguishable by the leaves growing from the depression in the crown.

PALO ALTO—Flesh white, fine texture, tender, free from core and stringless, and of superior flavor, sweet and rich.

LONG WHITE DUTCH—It grows smooth, long roots of excellent quality and is preferred in some sections to other sorts.

PEPPERS

You Can Grow Them Mild or Hot At Home

oz. for 1500 plants. c oz. plants an acre.

Strictly a hot climate vegetable and not well adapted to the Coast section of the Northwest. Plants are started in hotbeds and transplanted after the weather has settled, the culture is practically the same as for tomatoes. Frequent cultivation, plenty of moisture, liberal applications of Morcrop Fertilizer are great factors in their successful culture.

CHINESE GIANT—Mammoth size, splendid shape, glossy red fruits, bears continuously.

Pkt., 10c; Oz., 90c; ¼ lb., \$2.75; Lb., \$8.25

Prices All Following Varieties

Pkt., 10c; Oz., 55c; ¼ lb., \$1.75; Lb., \$5.25

BELL OR BULL NOSE—Plants are vigorous, fruits large, thick mild, flesh of fine quality, bright crimson.

LONG RED CAYENNE—Hot and pungent, slender twisted pods, medium early bright red when ripe.

PIMENTO—Very mild with thick flesh of peculiar delicate flavor, prolific, good shipper.

RUBY KING—Large, bright red fruits with pleasant and mild flavor, best for slicing.

PARSLEY

1 oz. for 250 of row.

The seed of parsley germinates very slowly and it is well to soak the seed a day before planting. Radishes are often sown with parsley to mark the rows. Plant only ¼ to ½-inch deep in rows 18 to 24 inches apart and thin to 12 or 16 inches in the rows. Be sure to firm the soil well over the seed; this hastens germination. In our mild climate on the Coast parsley lives outside all winter. Used mostly for seasoning and garnishing.

Prices Both Varieties

Pkt., 10c; Oz., 20c; ¼ lb., 40c; Lb., \$1.20

CHAMPION MOSS CURLED—Compact growing, hardy, vigorous, with leaves finely curled, excellent flavor.

HAMBURG—A turnip rooted sort, the leaves are used for garnishing, the roots for salads and soups.

This mark **JULY'S** is placed before the names of certain vegetables in this catalog to indicate that these varieties have special merit. You will make no mistake by selecting these sorts for your garden.

PEAS

There Is No Food More Delightful
Than Tender Peas Fresh from the Garden

1 lb. for 120 feet of row. 100-150 lbs. per acre.

Green Peas are at their best when perfectly fresh, and should come to the table within five or six hours from the vine. Peas need a rich, friable soil, but an over-supply of nitrogen will result in a rank growth of fruitless vines. Most of the cultivation for Peas should be done before they are planted, and it is most important that the ground be well prepared.

The seed should be sown in drills very early in spring, as soon as the ground is in good condition to work, and covered two or three inches deep. Rows of the extremely dwarf varieties may be as close as 12 to 18 inches apart; the semi-dwarf and tall varieties should be two to four feet apart.

Some sow the seed in double rows six inches apart, placing trellis or brush between the rows, thus making one row of supports do for two rows of peas.

For succession seed should be sown at intervals of about two weeks until the middle of June. They do not do well in hot weather in summer, but good crops may again be produced in the fall.

On the Pacific Coast, where the winters are mild, the seed may be planted in rather light, porous, well-drained soil in November, as instructed elsewhere for Sweet Peas, and will be ready for use early in June.

Peas are cold weather vegetables and should be planted either very early or rather late. Seed inoculated with Farmogerm produces heaviest yields. The early dwarf sorts need no support but the tall varieties should be trellised. All varieties are helped if fertilized with Morcrop.

Prices All Varieties, Except as Noted

Pkt., 15c; 1/2 lb., 20c; 1 lb., 35c; 10 lbs., \$3.00
Early Varieties

LILLY'S AMERICAN WONDER—Very early, and of dwarf compact growth, about twelve inches high. Very popular with those who object to making a support for the vines. The pods are about three inches long, straight, round, blunt at the ends, and light green. The peas are of medium size, wrinkled, and of fine quality.

ALASKA—A well-known, smooth seeded, extra early variety, extensively used by canners. The vines are strong and vigorous, two feet high, and of light green color. The pods are about three inches long, and are well filled with round, blue peas, slightly pitted.

LILLY'S GRADUS—It is equal in quality to most of the late varieties, and many of our customers use it exclusively, sowing in succession for early, medium and late.

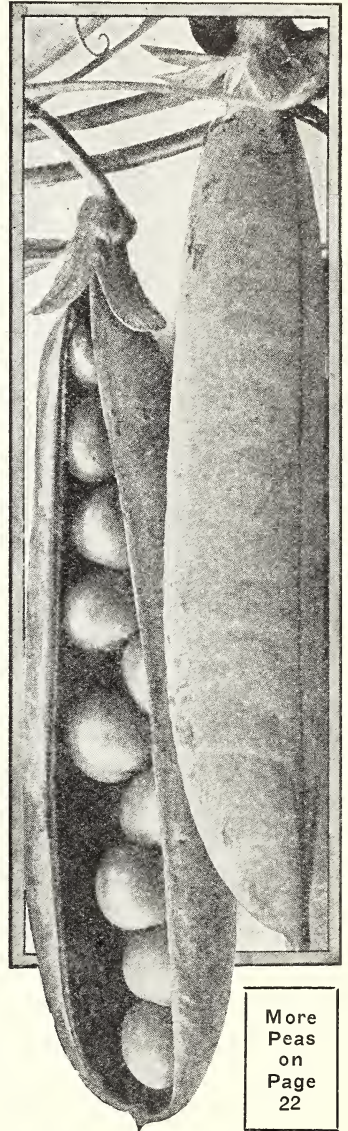
The vine is vigorous, robust, heavy stemmed, and grows only two and one-half to three feet high. The pods are large and are filled with six to ten very large, wrinkled, narrow peas of the most delicious flavor as large, as sweet, and as tender as the finest late peas. Lilly's seed is grown from the original strain, acclimated in the Northwest. See Also Front Cover Collection.

WASHINGTON WONDER—Grows only about sixteen inches high, and requires no support. It is quite prolific, and produces a good crop of well filled pods containing six to nine good-sized wrinkled peas of excellent flavor. Sufficiently hardy to be sown in the fall on the Pacific Coast, thereby producing peas several weeks earlier than spring sown seed. It is as early as the extra smooth varieties, and very much superior in quality and flavor.

LAXTONIAN—A large podded, dwarf variety on the order of Gradus, though more dwarf and a little earlier. Height 1 1/2 feet; pods and vine dark green; pods 3 3/4 inches long, straight and pointed, containing 6 to 8 large, dark green peas.

Pkt., 15c; 1/2 lb., 20c; 1 lb., 40c;
10 lbs., \$3.50

LITTLE GEM—A medium early dwarf variety, growing about fifteen to twenty inches high, robust, branching, and productive. The pods are about three inches long, well filled.



More
Peas
on
Page
22

PEAS

The Home Grown Are Tender and Sugary
Plant Some Every Two Weeks for Succession

Prices All Varieties Except As Noted
Pkt., 15c; 1/2 lb., 20c; Lb., 35c;
10 lbs., \$3.00

SUPERB—An exceptionally early, productive and handsome pea. Height 16 inches. Vine and foliage moderately heavy, medium green; pods deep green, 4 inches long, semi-broad, pointed and well filled with 8 to 9 very large and very dark green peas. Fully as early as Laxtonian and more productive; seed blue, semi-wrinkled.

Pkt., 15c; 1/2 lb., 20c; Lb., 40c;
10 lbs., \$3.50

THOMAS LAXTON—Very similar to Gradus in every way except the shape of the pods, the ends of which are square, and the pods and vines are a darker green. It is nearly or quite as early as Gradus, and the large wrinkled, dark green peas are sweet, tender, delicious, and unexcelled in quality by any of the late varieties. The vines grow about three feet high.

Late or Maincrop Varieties

TALL TELEPHONE—The old standard market gardener's main crop, large-podded pea. Vine and foliage strong and heavy, medium green. Grows four to five feet high, and bears an abundance of long, straight, pointed pods filled with large peas of a rich, sugared flavor. Main crop, very productive.

DWARF TELEPHONE—An improvement on the old Daisy, having larger and darker green pods. Height 2 1/2 feet, vine and foliage dark green and exceptionally stout; pods dark green, 4 1/2 inches long, straight and pointed; containing 8 to 9 dark green peas of the best quality.

ALDERMAN—A splendid large podded main crop pea, growing about five feet high. The pods are larger than the Telephone, are dark green, and are well filled with large wrinkled peas of fine flavor.

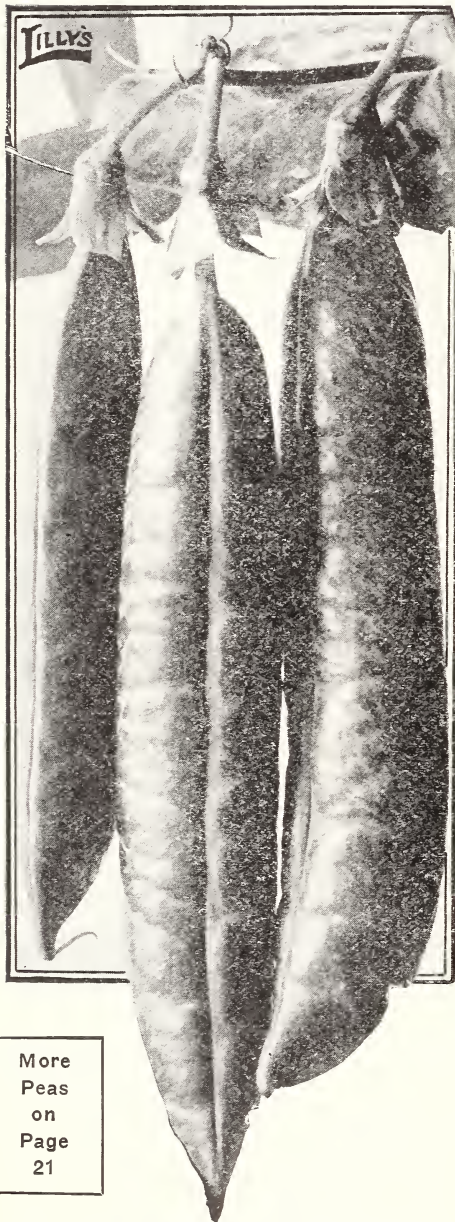
Sugar or Edible Pod Varieties

SWEDISH SUGAR—A tall edible pod pea of decided merit. Excellent eating both as pod and shell peas. Sweet in flavor. Grows 6 to 7 feet high. Our stock is true.

DWARF GRAY SUGAR—An edible pod pea growing about two feet in height. Pods very delicious when cooked same as green or wax beans.

Peas from any one planting will remain in the best condition for use only for a comparatively short time. To have a constant supply throughout the season, a succession of plantings should be made.

The dwarf varieties do not bear as heavily nor for as long a period as the climbing sorts, but for small gardens they have the advantage that they are economical in space and do not require support. Consequently they are grown almost exclusively by many Western gardeners. One or two dwarf sorts sown every ten days or two weeks will maintain a supply.



More
Peas
on
Page
21

BLUE BANTAM—The dwarf vigorous vines average fifteen inches in height and carry really enormous crops of large, deep bluish-green pods. The pods measure four to four and one-half inches long and are tightly packed with eight to ten large, deep bluish-green peas of most luscious flavor.

Pkt., 15c; 1/2 lb., 20c; Lb., 40c;
10 lbs., \$3.50

POTATOES — Certified Seed

The World's Most Staple and Easiest Grown Vegetable

1 lb. for 12-15 feet of row. 700-900 lbs.
per acre.

A rich, sandy loam is best suited to the production of Irish Potatoes, and the Morcrop Fertilizers employed should contain high percentages of potash. The main crop of Irish Potatoes for family use should be grown elsewhere, but a small area of early ones properly belongs to the garden. The preparation of the soil should be the same as for general garden crops.

Early potatoes should be planted as early in the spring as it is possible to work the land. Late potatoes should be planted late in May or during June. The rows should be two and one-half to three feet apart, and

the hills fourteen to eighteen inches apart in the row.

Lay off the rows with a one-horse plow or lister, and drop the seed, one in a place, in the bottom of the furrow. Cover the seed to a depth of about four inches, using a hoe or one-horse plow for the purpose.

As soon as the potatoes appear above the ground and the rows can be followed, the surface soil should be well stirred by means of one of the harrow-toothed cultivators. Good cultivation should be maintained throughout the growing season, with occasional hand hoeing, if necessary, to keep the ground free from weeds. Towards the last the soil may be well worked up around the plants to hold them erect and protect the tubers from the sun after the vines begin to die.

Certified
Seed
Insures
Best
Results

Plant
Certified
Seed
This
Year



Certified Seed Potatoes cost more than common seed potatoes because it costs more to produce them, and they are worth more because they are true to name and their superior yielding qualities have been proven in the field under State supervision.

BUY CERTIFIED SEED THIS YEAR

We can supply the following varieties:

EARLY ROSE—Long, with pink skin, deep eyes, meat splashed rose, early and prolific.

EARLIEST OF ALL—Round, smooth white skin, deep eyes, very early and especially fine flavored.

BEAUTY OF HEBRON—Long flattened shape, large, pink skin, medium early.

NETTED GEM—Long, shallow eyes, heavily netted skin, fine flavor, favorite market sort.

BURBANK—Large long tubers, heavy yielder, keeps well, has good flavor.

Common Seed Potatoes

We can generally furnish any popular variety on order. It is better, however, to specify second choice when ordering common seed potatoes, as the demand is uncertain and your first choice may be sold out.

Any of the foregoing varieties are usually obtainable as well as American Wonder, Irish Cobbler, Gold Coin, Pride of Multnomah, Early Ohio, etc.

PUMPKINS

1 oz. for 30-40 hills, 4 lbs. for an acre.

Pumpkins are very easy crops to grow provided they are given warm, rich soil. They require quite a long season and should be planted as early as frost danger is past. Sandy loams are preferred. Plant one to two inches deep in hills eight to ten feet apart each way and allow only three or four plants to remain in a hill. Because of their spreading habit Pumpkins are generally planted in patches or fields of corn or potatoes where the vines can grow undisturbed. They require 75 to 90 days to ripen.

JILLYS JUMBO OR KING OF MAMMOTHS—The largest pumpkin grown, sometimes weighing more than two hundred pounds. The skin is salmon-orange, and the flesh is bright yellow, very thick, and of excellent quality for pies as well as for stock.

Pkt., 5c; Oz., 15c; 1/4 lb., 45c;
Lb., \$1.35

Prices Following Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 35c;
Lb., \$1.00

SUGAR OR SWEET PIE—Medium size, very sweet, prolific, meat thick and yellow.

CONNECTICUT FIELD—Large productive field pumpkin, very good for pies.

LARGE CHEESE—Large, abundant fruiting sort, thick meat, suitable for canners.

For Next Winter's Pies—And You Can Grow Them Easily

Plant some field pumpkins this year if you want cheap hog and cattle feed.

RUTABAGAS

1 oz. for 400 feet of row. 1-2 lbs. plants an acre.

The culture of the rutabaga is the same as for the turnip, except that it requires more room and a longer period for growth. The roots are quite hardy and will withstand considerable frost. They are used for the table like turnips, and are valuable for stock food.

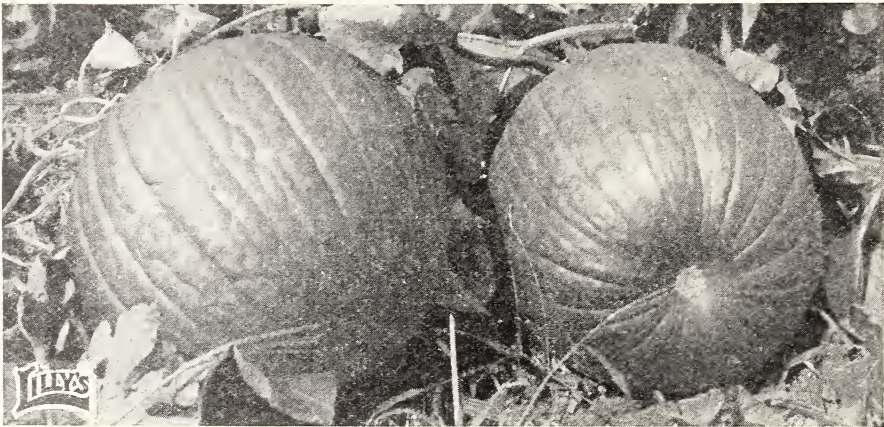
Price All Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 25c;
Lb., 75c

JILLYS KING OF SWEDES—Large, productive, oval-shaped, flesh rich yellow, splendid keeper.

AMERICAN PURPLE TOP—Popular for table use and stock, flesh yellow, solid and sweet.

BANGHOLM—Very large, flesh mild, firm and sweet, color yellow, texture fine.



RHUBARB

Natures Spring Tonic from the Garden
Purifies the Blood—Tones Up the System

1 oz. for 150 feet of row. 6 oz. makes plants for an acre.

Although the crop is so easily produced and so certain and regular after the roots are established, a large number of home gardens are still without it. Everyone relishes rhubarb pie early in the spring, and this plant gives the first available material for pies.

When started from seed it should be planted like carrots and transplanted the following fall. Thrives best in light soil which should be very rich and full of humus or

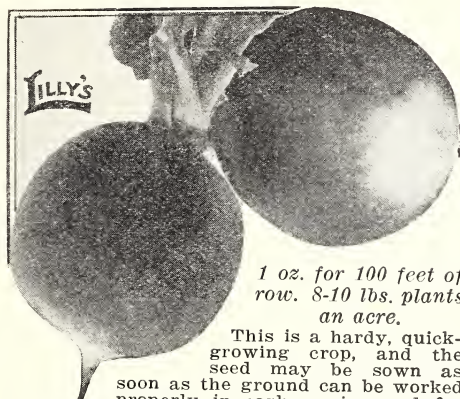
vegetable matter. Rhubarb can be forced during the winter in the cellar without heat by planting in boxes of rich soil. Earlier and better rhubarb can be grown outdoors if the light is excluded by covering with an inverted barrel or box.

MAMMOTH VICTORIA—It is vigorous and very productive of thick, red stalks of fine quality, juicy and rich.

Pkt., 10c; Oz., 25c; 1/4 lb., 75c;
Lb., \$2.25

RADISHES

Satisfy That Craving for Something Snappy with Your Meals



1 oz. for 100 feet of row. 8-10 lbs. plants an acre.

This is a hardy, quick-growing crop, and the seed may be sown as soon as the ground can be worked properly in early spring and for succession at intervals of ten days or two weeks as long as wanted. Depending upon the variety they require 20 to 70 days to grow. The soil should be very rich, light and warm. To make them crisp and brittle they must be grown quickly. It is well, therefore, to make a heavy application of Morcrop on the early sorts, a little nitrate of soda will be very beneficial.

The seed may be sown about half an inch deep in drills a foot apart and the plants thinned to about two inches, or the seed may be mixed with seeds of slower growing crops such as lettuce, carrots, parsnips, etc., and the radishes will be used before the other crops need the space.

Winter radishes are grown the same as turnips, and the seed should be sown in the latter part of July or any time in August.

Prices All Varieties

Pkt., 5c; Oz., 15c; $\frac{1}{4}$ lb., 35c;
Lb., 95c

JILLY'S EARLIEST OF ALL—A very superior extra early turnip-shaped radish, equally good for forcing or early outdoor culture. It is small, very uniform, round, and the color is bright scarlet with an attractive white tip and a very small taproot. The flesh is sparkling white, mild, crisp and tender.

EARLY SCARLET TURNIP—Red, turnip shaped, very early, medium size, quite pungent.

JILLY'S EARLY SCARLET TURNIP WHITE TIP—Small scarlet radishes with white tip, very early.

CRIMSON GIANT—Largest of the round, early sorts, flesh white, solid, crisp, mild and tender.

FRENCH BREAKFAST—Olive-shaped, splendid flavor, quick growing, desirable for forcing.

HALF LONG DEEP SCARLET—Flesh crisp, juicy and pungent, forces well, quite early.

LONG BRIGHT SCARLET—Roots smooth, uniform and long, fast growing, mild flavor.

JILLY'S WHITE ICICLE—The finest early long white radish. It is ready for use nearly as early as the early turnip-shaped varieties, and remains in good condition longer than any other early variety. The tops are very small, and the roots are long, slender, pure white and very attractive. The flesh is crisp, tender, sweet and delicious, and remains in that condition until the roots have attained large size, sealed packages.

ROUND BLACK SPANISH—Flesh snow white, firm and pungent, roots round but large.

CHINA ROSE WINTER—Long, tapering, smooth roots, flesh white, mild flavored, keeps well.

This mark **JILLY'S** is placed before the names of certain vegetables in this catalog to indicate that these varieties have special merit. You will make no mistake by selecting these sorts for your garden.



SPINACH Full of Iron and Other Necessary Minerals The French Call It the Broom of the Stomach

1 oz. for 100 feet of row. 10-12 lbs. for an acre.

Spinach is easy to grow, thrives in cool weather, and is valuable for greens during the winter and early spring. Can be grown ready for the table in 40 to 60 days.

Spinach is grown both as a fall and spring crop. Fall crops are sown in August and September and the spring crop either in November or early spring. During growing weather approximately eight weeks are required to grow the crop. Fertilize liberally with Morcrop before planting the seed as much of the satisfaction in growing spinach is derived from crops that grow quickly to a large size.

TILLY'S KING OF DENMARK—A desirable new variety, stands two weeks before running to seed, plants vigorous, leaves large, round and quite crumpled.

Pkt., 5c; Oz., 15c; ¼ lb., 25c;
Lb., 75c

Prices Following Varieties
Pkt., 5c; Oz., 15c;
¼ lb., 25c; Lb., 60c

MAMMOTH VICTORIA—Early, long standing, large thick leaves, suitable for fall or spring planting, thrives even in hot weather.

TILLY'S BLOOMSDALE SAVOYED—Very early, hardy, leaves large, round and thick, very much savoyed.

SALSIFY

1 oz. for 120 feet of row. 8-10 lbs. plants an acre

This plant requires a full season to reach maturity. Plant half an inch deep in rows 24 to 30 inches apart. Thin to 3 inches apart in the rows and keep the soil well worked. The roots should reach a foot in length and 1½ to 2 inches in diameter at the top.

A light, mellow, well fertilized soil that has been worked deeply is best. The culture is similar to other root crops and the matured vegetables can be left in the ground and dug as required for winter use. Should be more generally grown as it can be used in

For spring and summer use, sow half an inch deep, in drills one foot apart very early in spring and at intervals of two weeks for succession.

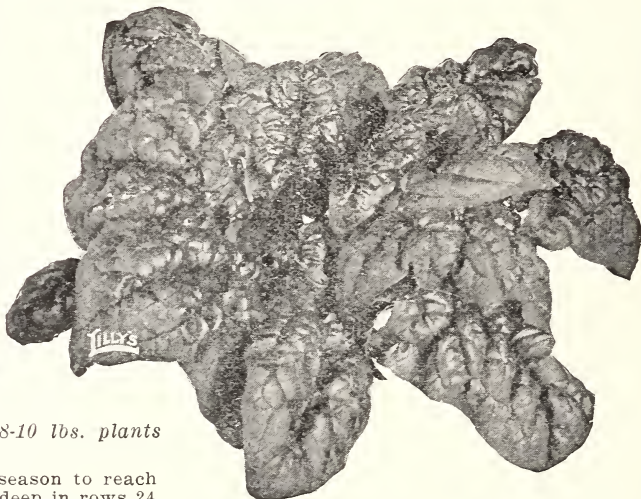
For winter and early spring use, sow in November after other crops have been removed from the ground. Mulch with straw on the approach of very cold weather.

The soil should be light and rich. In gathering spinach the entire plant is removed rather than merely cutting off the leaves. If not sown too thickly, the only thinning necessary will be to use the larger plants first, giving the smaller plants room to develop.

THICK LEAVED IMPROVED—Leaves large, crumpled and thick, slow to run to seed, very hardy.

PRICKLY WINTER—Large, smooth, three-cornered leaves, the standard sort for fall planting.

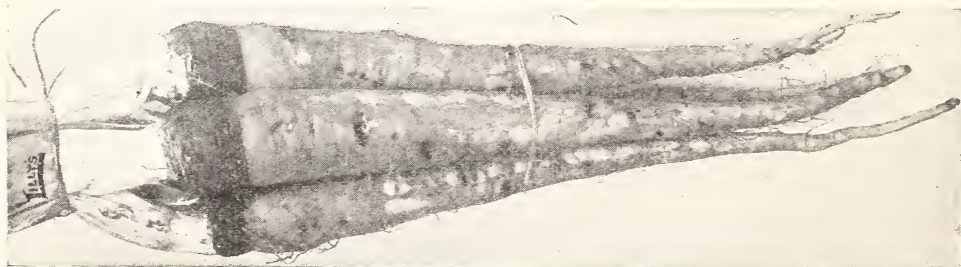
LONG STANDING—Late maturing, remains in condition longer than most sorts, large plants.



many ways. Boiled and diced, rolled in cracker dust and fried in butter gives it a decided flavor of fried oysters.

MAMMOTH OR SANDWICH ISLAND—This is the most popular variety, growing twice the size of any other. Mild and delicately flavored.

Pkt., 10c; Oz., 30c; ¼ lb., 85c;
Lb., \$2.50



SQUASH

For Summer and Winter Use
Baked Squash—Squash Pie—Squash Sauce

Bush Varieties—1 oz. for 30-40 hills, 4-6 lbs. for an acre.

Vining Varieties—1 oz. for 10-15 hills. 3-4 lbs. for an acre.

The early summer varieties of squash do well in all sections of the Northwest, and if given proper care the winter varieties may also be grown in even the most unfavored sections.

They require a warm, fertile soil, preferably sand, well-rotted compost or Morcrop Fertilizer should be mixed with the soil around the hills as squash are gross feeders. The bush varieties of summer squash are grown almost exclusively now, and these should be planted in hills half an inch deep about four feet apart. Winter varieties, such as the Hubbard, should be planted in hills one inch deep, 12 feet each way. Care should be used to see that the squash are all picked and stored before the first fall frost, as they are very easily injured. In gathering the winter varieties care should be exercised that the stem is not broken from the squash, and that the fruit is not bruised.

Prices All Varieties
Pkt., 5c; Oz., 15c; ¼ lb., 45c;
Lb., \$1.35

Bush Varieties

WHITE BUSH SCALLOP—Very early round, flattened, scalloped edge, fruits waxy white.



LILLY'S EARLY SUMMER CROOKNECK—Early, deep yellow in color, true crookneck form, densely warted.

DELICATA—An early hybrid, producing fruits varied in form and color, but deliciously flavored.

Vining Varieties

LILLY'S HUBBARD—Large, dark green, densely warted, thick yellow meated fruits, vigorous vines.

MAMMOTH CHILI—The largest of the squashes, orange-colored, oblong, smooth, deep meated fruits.

SIBLEY OR PIKES PEAK—Smooth-shelled, pale green fruits, meat deep orange colored, fine flavored.

GOLDEN HUBBARD—Orange red, moderately warted shell, good keeper, deep meated, early maturing.

BANANA—Average length 2 feet, deep firm flesh, yellow shell, keeps well, used as a marrow when young.

Marrow Squashes

ENGLISH VEGETABLE MARROW—Oblong, creamy white fruits, used when young either boiled or fried like egg plant.

LILLY'S BOSTON MARROW—Large oval fruits, flesh salmon yellow, fine texture and flavor.

It costs you nothing to get the protection that is sealed in each package of Lilly's Verified Seeds from the North. Replacement free if you should be dissatisfied.

SEED DISINFECTION

One simple, inexpensive, effective treatment DU PONT SEMESAN Makes Seeds Healthy.

Semesan - treated seeds are protected against destructive plant diseases that cause reduced yields and blemished, unprofitable crops. Easily and simply applied in either the liquid or the convenient dust form.



Semesan treatments cost from ¼c to 1c per pound of seed.

Valuable Booklets Free.

SWISS CHARD

1 oz. for 100 of row. 4 to 6 lbs. plants an acre.

Swiss Chard is a beet grown for its leaves, which are large, tender, succulent, and highly esteemed as "Greens" on account of their agreeable flavor. The leaves are boiled like spinach, the stem or midrib can be removed before cooking and only the best leaves should be used as new leaves appear after picking. Culture is the same as for table beets.

GIANT LUCULLUS—Large savoyed leaves, thick fleshy stalks.

Pkt., 5c; Oz., 15c; ¼ lb., 35c;
Lb., 95c

TOMATOES

1 oz. for 3000-4500 plants.

The plants should be started in a greenhouse, hotbed, or in a warm, light room in February or early in March, and transplanted once or twice before being set outdoors. Plant the seed a quarter to half an inch deep. The best plants are produced by transplanting single plants to pots or berry boxes.

They cannot stand any cold, and should not be set outdoors until the weather is thoroughly warm. The soil should be rich, mellow, and in fine condition. If the plants are not to be pruned they should be set four feet apart each way. They may be set in rows with early maturing crops that will be out of the way before the tomatoes need the room.

West of the Cascade Mountains, where the climate is cool, they must be favored in every way possible. Set the plants two feet apart in rows four feet apart. Prune the plant to a single stem and keep all side shoots and other superfluous growth off, and train the plants to a stake set at each plant. Or set the plants four feet apart, set a stake at each plant and stretch wires along the row of stakes, one twelve inches from the ground and the other thirty inches from the ground. This will form a trellis for the plants which should be pruned to four stems, which should be trained on the wires.

Pruning increases the size of the fruits, and also permits the sunlight to reach the blossom and fruits, thus promoting a much earlier crop. 125 to 150 days are required to ripen the crop.

There are three varieties that are well adapted to west of the Cascade Mountains—they are "Lilly's Puget Sound Special," "Sparks Earliana," and "Lilly's Forcing."

Large Fruited Varieties

LILLY'S PUGET SOUND SPECIAL — Most dependable west of the Cascades, smooth, medium sized fruits, flesh solid, meaty, coreless and rich red colored.

SPARKS EARLIANA—One of the earliest, fruit borne in clusters, smooth, uniform size and solid.

BONNY BEST—Fruits in clusters, ripens uniformly, solid and smooth, early, productive.

The Fruit of the Gods Everybody Enjoys Tomatoes

NEW STONE—Late, very large, solid, smooth oval shaped fruits, excellent for shipping.

JOHN BAER—Early, very productive, bright red fruits that are round, smooth and solid.

CHALK'S EARLY JEWEL—Exceptionally fine, early, uniform, round, smooth, scarlet fruits.

Prices All Above Varieties

Pkt., 10c; Oz., 40c; ¼ lb., \$1.25;
Lb., \$3.75

LIVINGSTON'S CORELESS — Medium late, large, globe shaped, coreless, flesh heavy and bright red.

Pkt., 10c; Oz., 65c; ¼ lb., \$2.00;
Lb., \$6.15

LILLY'S FORCING—The fruits are close, stem smooth, early, firm and meaty, very prolific.

Pkt., 10c; Oz., 65c; ¼ lb., \$2.00;
Lb., \$6.15

DWARF CHAMPION—Dwarf, compact habit, early, vigorous and productive, medium size.

Pkt., 10c; Oz., 65c; ¼ lb., \$2.00;
Lb., \$6.15

Prices All Following Varieties

Pkt., 10c; Oz., 70c; ¼ lb., \$2.35;
Lb., \$7.00

PONDEROSA—Massive size, good form, smooth, solid, almost seedless, a delicious flavor.

Small Fruited Varieties

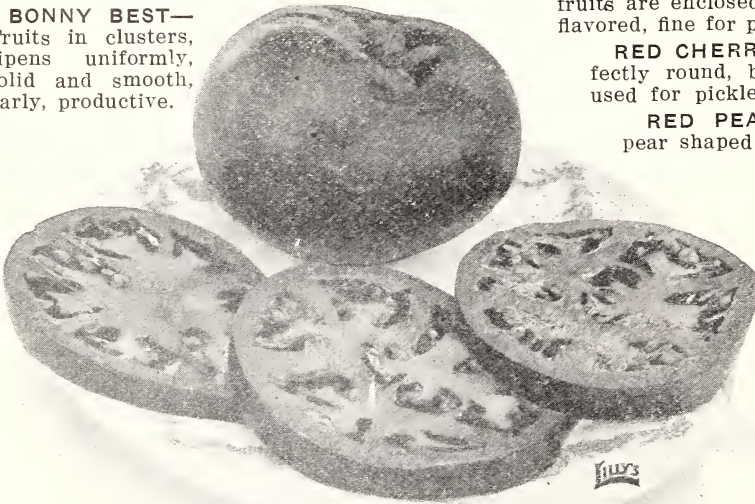
GOLDEN HUSK OR GROUND CHERRY — The numerous small fruits are enclosed in husks, sweet flavored, fine for preserves.

RED CHERRY — Small, perfectly round, bright red fruits, used for pickles, etc.

RED PEAR — The small pear shaped bright red fruits are used for preserves and "tomato figs."

YELLOW PEAR — Similar to red pear in shape and size, but of clear yellow color.

YELLOW PLUM — Large clusters of small plum-shaped fruits; very fine flavors.



TURNIPS

Are Fine Winter Food—Plant Them
After Your Early Crops Are Gone

1 oz. for 400 feet of row. 2-4 lbs. plants
an acre.

Turnips may be grown in any good garden soil, but do best in rich, light, sandy soil. For table use, the early varieties should be sown a quarter to half an inch deep as soon as the ground is in good condition to work in spring in drills twelve to fifteen inches apart; the plants should be thinned to three inches apart in the rows. For succession, sow at intervals of about three weeks. Turnips should be used for table while young, before they are full grown. They may be grown during the summer but do best in cool weather in spring and fall, and require 45 to 90 days to mature.

For fall and winter use, the seed should be sown in August or September. For stock food, the seed is sometimes sown broadcast in the field after last cultivation of corn or other cultivated crops.

Turnips are quite hardy and need not be harvested until after several frosts. West of the Cascade Mountains they are sometimes left in the ground until wanted for use during the winter. They may be stored in a cellar or buried in a pit.

JULY'S SNOWBALL—Very early, small globe-shaped, smooth, thin skinned, flesh white, crisp and sweet.

Pkt., 5c; Oz., 15c; ¼ lb., 45c; Lb., \$1.35

EARLY WHITE MILAN—Very early, medium size, fine grained, tender, mild, sweet flavored.

Pkt., 5c; Oz., 15c; ¼ lb., 45c; Lb., \$1.35

Prices Following Varieties

Pkt., 5c; Oz., 15c; ¼ lb., 30c; Lb., 75c

JULY'S PURPLE TOP WHITE GLOBE — Early, globe-shaped, medium sized, yields heavily and keeps good.

PURPLE TOP STRAP LEAVED — Roots flat, medium size, flesh white, fine grained and tender.

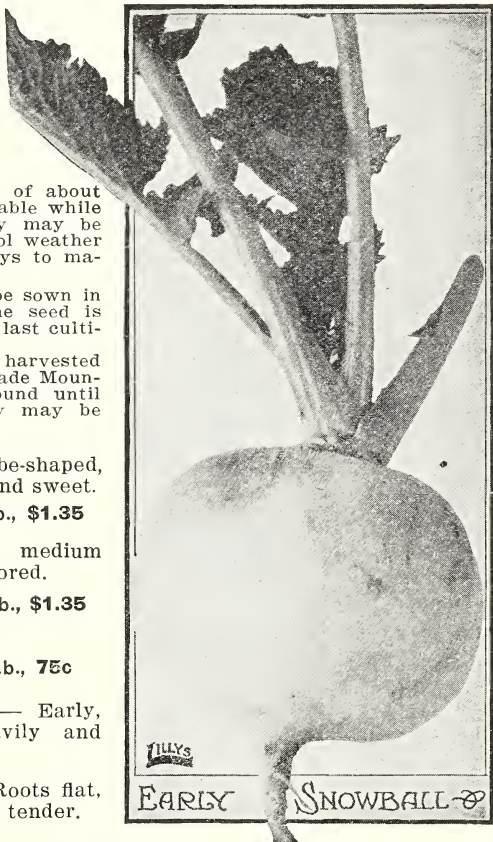
GOLDEN BALL OR ORANGE JELLY—Delicious flavored, smooth, round, yellow flesh and skin.

PETROWSKI — Medium size, smooth skin, and flesh yellow, top short and spreading, flesh crisp, tender and very pleasant; keeps well.

YELLOW ABERDEEN — Large, late, sweet, yellow fleshed, long keeper and very productive.

COWHORN — Long, crooked shaped, white, fine grained, quick growing stock turnip.

This mark **JULY'S** is placed before the names of certain vegetables in this catalog to indicate that these varieties have special merit. You will make no mistake by selecting these sorts for your garden.



TOBACCO

A packet for 1000 plants.

Tobacco can be grown in the warmer sections of the Northwest. The plants should be started early in spring in hotbed or cold frame and transplanted to the open ground when the weather has become thoroughly settled and warm. Fertilize liberally.

It requires 60 days or longer to produce plants, the seed germinates very slowly.

In Tobacco growing sections the plants are started by sowing the seeds in the ashes where brush has been burned as weeds do not start readily in such spots.

Set the plants 4 ft. apart each way and cultivate the same as corn.

CONNECTICUT SEED LEAF—Hardy, vigorous, large leaved, suitable for the Northwest.

Pkt., 10c; ¼ oz., 25c; Oz., 70c

HAVANA—Medium sized leaves, very thin and of fine texture.

Pkt., 10c; ¼ oz., 30c; Oz., 90c

Flower Seeds



Alyssum in the Border

Ageratum

Floss Flower

Hardy annual, growing from 6 to 10 inches high. Sow seed in hot-bed during February or March and transplant for borders when all danger from frost is past, setting plants four to six inches apart.

Keep the faded flowers picked, otherwise the plants will stop flowering and the clear blue effect will be marred. When sown in open ground wait until the soil is good and warm, in this case the plants do not reach their full splendor until towards fall.

Ageratum prefers rich, light soil and not much shade, and when conditions are right will continue to bloom from 10 to 15 weeks.

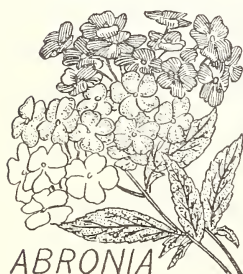
No. 101. **AGERATUM, Mexicanum**—Mixed. About eight inches high, of free branching habit.

Pkt., 10c; $\frac{1}{4}$ Oz., 30c

No. 439. **AGERATUM, Little Dorrit**—The plant is six inches tall and a foot wide and is a perfect mass of blue flowers all summer.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

AFRICAN DAISY—See *Arctotis*.



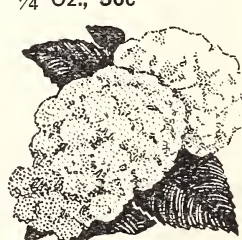
ABRONIA



ACROCLINIUM



ADONIS



AGERATUM

Acroclinium

Everlasting

This is one of the smaller, daintier, annual everlastings growing 12 to 15 inches tall and bearing pink or white double daisy-like flowers with golden centers, singly on long stems in great abundance. The plant is attractive in the garden and also useful as a source of cut flowers. To secure bright, attractive flowers when dried, flowers should be gathered the first day they open.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about three times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding. If started indoors, young plants should be transplanted to the open ground after it is warm and the weather thoroughly settled.

No. 1137. **ACROCLINIUM, Everlasting**—White and pink mixed. Pkt., 10c; $\frac{1}{4}$ Oz., 25c

Abronia

Sand Verbena

A rapid growing, trailing annual which is excellent for growing in baskets, the rocky, or the open border. The trailing stems often reach a length of 3 to 5 feet. They throw up numerous flower-spikes throughout the summer and fall. The blooms are borne in clusters not unlike Verbenas. They are of an attractive, bright rosy lilac color with white centers, quite fragrant and the seed is best sown in the open after all danger from frost is passed. It delights in a dry, poor soil and sunny situations.

No. 1170. **ABRONIA, Umbellata**—Mixed colors. Pkt., 10c; $\frac{1}{4}$ Oz., 50c

Adonis

Pheasant's Eye

It would be difficult to find a bright flowered annual that blooms earlier than does Adonis. Flowers are bright colored, resembling large Buttercups with finely cut ornamental foliage. Grows about a foot high and is especially suitable for rock gardens and borders. Any good light soil will do and they grow either in shade or sun, partial shade being preferred. Develops rather slowly from seed and does not like to be moved.

Sow seed outdoors where the plants are to remain in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about 3 times its size. Thin to stand 10 to 12 inches apart.

No. 1171. **ADONIS**—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 50c

Antirrhinum

Snapdragon

This is a valuable border plant, and although it is a perennial, it may be treated as an annual in the North-west, blooming the first season from seed. The bright colors and peculiar form of the flowers are attractive and the spikes are useful for cutting, as they keep fresh a long time. Seed may be sown in the open ground in March or April, and the plants will bloom in August, but for early bloom, the seed should be sown in the fall outdoors or in the hotbed in February or March, and the plants transplanted into beds of warm, dry rich soil early in April or May. Whole masses of Snapdragons are appealing, but individual plants have a charm which we cannot resist. As cut flowers they are very adaptable. During winter they should be protected with a light mulch, and will bloom early the next spring. Grow from 1 to 3 feet high. They succeed best in a rather light soil in a sunny location.

No. 921. ANTIRRHINUM, Black Prince—Dark crimson flowers and very dark foliage. Grows about eighteen inches high.

Pkt., 10c; ¼ Oz., 50c

No. 1073. ANTIRRHINUM, Golden King—A splendid yellow Snapdragon; three feet high.

Pkt., 10c; ¼ Oz., 50c

No. 1074. ANTIRRHINUM, Delicata—A beautiful pink; three feet high.

Pkt., 10c; ¼ Oz., 50c

No. 1076. ANTIRRHINUM, Brilliant Scarlet—A very effective red. Three feet high.

Pkt., 10c; ¼ Oz., 50c

No. 1201. ANTIRRHINUM, Queen Victoria—Pure snow white. Three feet tall. Pkt., 10c; ¼ Oz., 50c

No. 1202. ANTIRRHINUM, Bronze—Brownish orange and copper-red shades. Three feet.

Pkt., 10c; ¼ Oz., 50c

No. 104. ANTIRRHINUM, Dwarf, Mixed—Best of the dwarf varieties, all colors mixed. Grows about eight inches high.

Pkt., 10c; ¼ Oz., 35c

No. 4. ANTIRRHINUM, Tall, Mixed—A mixture of good tall varieties, growing three feet high. All colors.

Pkt., 10c; ¼ Oz., 35c

AQUILEGIA—See Columbine.

Alyssum

Sweet Alyssum

Unexcelled for borders, beds, baskets, pots, rockeries, and for cutting. It is a hardy annual, and is covered with spikes of small white flowers during the summer and fall. It may also be grown in pots in the house during winter, where the exquisite fragrance is very pleasing.

Sow seed outdoors in the fall or in February under cover and transplant in April, or the seed may be sown where plants are to remain as soon as the soil can be worked.

No. 2. ALYSSUM, Benthami—White, grows 8 to 10 inches tall.

Pkt., 10c; ½ Oz., 25c

No. 1199. ALYSSUM, Little Gem—White, grows 4 to 5 inches tall. One of the finest for low beds and borders.

Pkt., 10c; ¼ Oz., 25c

No. 1204. ALYSSUM, Saxatile Compactum—Yellow flowered, grows 1 foot tall, blooms in May and June. Much used in rockeries in combination with Arabis.

Pkt., 10c; ¼ Oz., 35c



Antirrhinum or Snapdragon

Amaranthus

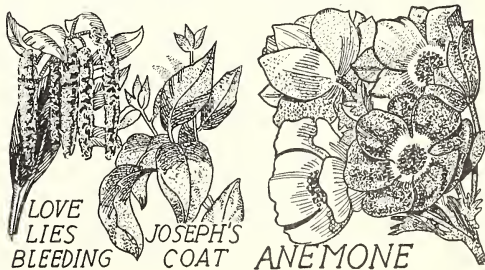
Love-Lies-Bleeding

This (annual) variety of Amaranthus has long drooping red flowers resembling heavy chenille. The plant reaches the height of 5 to 6 feet. They will grow best in the hottest locations. The soil should not be very rich as the colors are more brilliant when grown on poor soil and the foliage does not out-do the flowers. Sow seed outdoors as soon as the ground gets warm in the spring or start the plants indoors in February and transplant, setting the plants 4 to 5 feet apart as they require much space.

No. 1173. AMARANTHUS, Love-Lies-Bleeding—Red. Pkt., 10c; ¼ Oz., 30c

No. 1172. AMARANTHUS, Joseph's Coat, Tricolor. The foliage is beautifully marked with rich scarlet, yellow, green and white. Amaranthus is the most stunning of all variegated leaved plants. They grow to a height of 2 to 3 feet. Plants should stand about 2 feet apart.

Pkt., 10c; ¼ Oz., 30c



Anemone

Wind Flower

The Poppy Anemones are very pleasing hardy plants for the herbaceous border. Fine, large flowers; few plants compare with them in beauty. Excellent for bouquets and table decorations. Blooms in May and June; colors are mixed white, red, pink, etc., with bright colored centers.

Hardy perennial, grows from 6 to 10 inches in height. The blooms come in a great variety of colors and resemble, somewhat, the single poppy in shape. Blooms measure about 2 to 3 inches across.

They make a beautiful display when planted in beds or borders and are excellent for bouquets and table decorations. Seed should be sown in a light shady loam any time from April to August for next spring's bloom.

No. 1174. ANEMONE—Mixed colors.

Pkt., 10c; ¼ Oz., 50c

Arabis

Rock Cress

A hardy perennial and one of the earliest and prettiest of spring. Its spreading tufts are covered with a sheet of pure white flowers very early in spring. It withstands drought, and is unequalled for rockeries and edging. Grows six inches high and a foot or more in diameter. Sow the seed in fall or spring, preferably in seed bed, to be transplanted when wanted. May be propagated by division of plants or by cuttings.

No. 1035.—ARABIS, Alpina—White.

Pkt., 10c; ¼ Oz., 25c

Arctosis

African Daisy

This annual is easily grown from seed, each plant quickly forms a bush two feet across, with silvery white, deeply cut foliage. The daisy-like flowers measure 2½ inches across. They are silvery white with a sky-blue eye surrounded by a narrow yellow zone. The under part of the petal is lilac-blue. Borne on long stems above the foliage. The flowers are excellent for cutting as the stems are 10 to 12 inches long. Cut blooms last a week, closing each night and even some undeveloped buds will open in water. Plants grow to a height of two feet. Sow the seeds either in the open ground as soon as the ground is warm or start the plants indoors in February. The seed germinates rapidly and the bloom period lasts from July until frost. Plants should stand 12 to 18 inches apart.

No. 1136. ARCTOTIS, Grandis—White, shaded blue.

Pkt., 10c; ¼ Oz., 35c



ARABIS



ARCTOTIS



ARGEMONE



ASTER

Argemone

Prickly Poppy

These prickly-leaved, white and yellow Poppies are very interesting to grow. They are perennials in the south, but are best treated as annuals in the Northwest. They attain a height of three feet and flowers appear early in July and continue to come until frost. Some of the plants have beautifully variegated foliage. The seed should be sown where the plants are to remain as the plants are hard to move successfully. Thin the plants to one foot apart. Plants thrive best in light, rich soil and sunny location. They self sow.

No. 1175. ARGEMONE—Mixed colors.

Pkt., 10c; ¼ Oz., 50c

BABY'S BREATH—See Gypsophila.

BABY EYES—See Nemophila.

Asters

The aster is certainly one of the most satisfactory annual flowering plants. The great variety in its size, color, form and season of blooming makes it a most satisfactory plant for supplying cut flowers. In fact, many of the improved sorts produce flowers equal in form and size to some of the better sorts of chrysanthemums. The habit of growth adapts the aster not only to close planting for cut blooms, but some forms are robust, tall-growing plants, well adapted for use in an herbaceous border where late bloom and careless effects are desired. The more compact-growing, large flowered forms are most desirable for cut blooms, while the tall-growing, open types are most useful in wild gardens or for screens. The vigor and ease of culture of the aster are factors which contribute to its popularity. Plants from seed sown in the open ground in May bloom in September and October, when the flowers are seen at their best. For July and August blooms, the seed should be sown in March in cold frame or in pots or boxes in the house. Cover the seeds lightly with deep, rich, light soil and when the plants have three or four leaves, transplant to other boxes or pots, setting the plants about two inches apart. After all danger of frost is past transplant to the permanent bed, setting them twelve to eighteen inches apart, according to variety. Morning fertilizers are best. They require rich, well prepared soil and plenty of water.

Points to remember.

Do not keep the seed bed too damp. Checking the growth causes poor blooms and rust.

Shading plants when young prevents injury from bugs.

If plants become badly diseased, burn them.

Crego Giant Aster

Lilly's Crego Giant are the finest and largest of all Comet Asters. The flowers are immense, often five inches in diameter, and are composed of long, wavy, twisted petals gracefully formed into loose, yet densely double, half globes, equaling some of the finer Chrysanthemums.

The plants are of luxuriant, branching growth, two feet tall, and bearing twenty to thirty of these magnificent flowers on very long stems, which gives them added value for cutting. They keep in good condition longer than other varieties.

Price, Any Color or Mixed
Pkt., 10c; ¼ Oz., 50c

- No. 1012. ASTER, Crego Giant—White.
No. 1013. ASTER, Crego Giant—Pink.
No. 1036. ASTER, Crego Giant—Crimson.
No. 1037. ASTER, Crego Giant—Lavender.
No. 1077.—ASTER, Crego Giant—Azure Blue.
No. 1078. ASTER, Crego Giant—Purple.

Lilly's Dazzler Collection **C REGO GIANT ASTERS**—Consisting of one regular 10c packet of each of the above six varieties at the special collection price of 40c.

- No. 1079. ASTER, Crego Giant—Mixed.

Branching Asters

Lilly's Giant Branching, a beautiful, late flowering variety. The flowers are large, very double, and are borne on long stems. This variety is especially valuable for bedding.

Price, Any Color or Mixed
Pkt., 10c; ¼ Oz., 50c

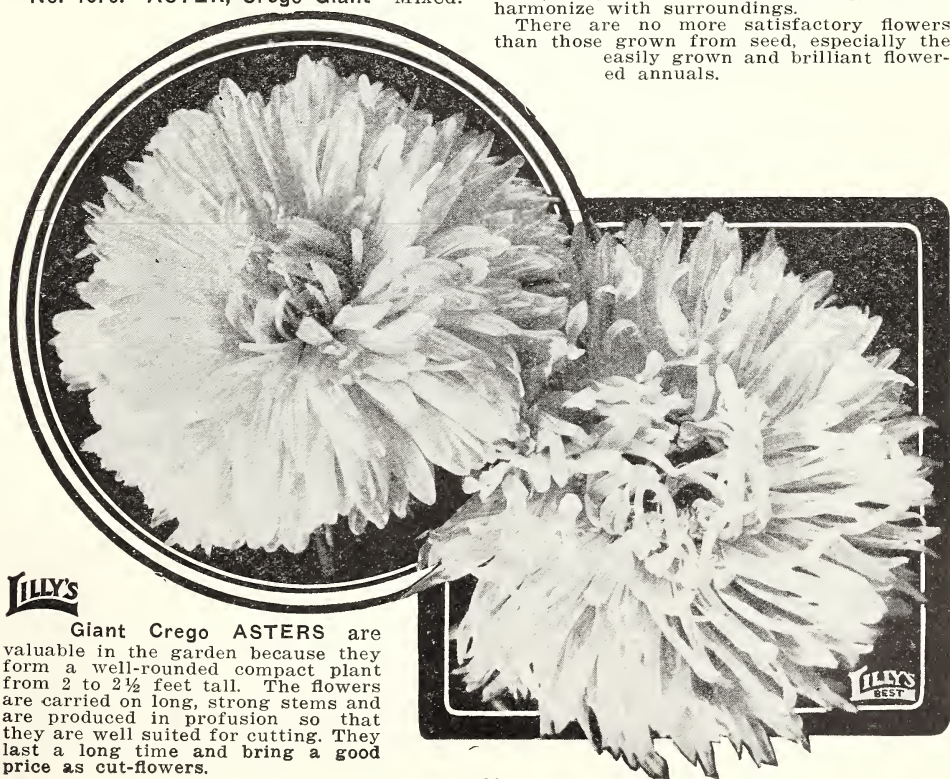
- No. 940. ASTER, Giant Branching—White.
No. 941. ASTER, Giant Branching—Pink.
No. 942. ASTER, Giant Branching—Lavender.
No. 1080. ASTER, Giant Branching—Crimson.
No. 939. ASTER, Giant Branching—Mixed.

No. 900. **Lilly's** Mixed ASTERS—A fine mixture of many of the best varieties of annual Asters, producing a great variety of splendid forms and colors.

Pkt., 10c; ¼ Oz., 40c

Flowers often make the difference between a habitation and a home, and it is surprising that there are so many unattractive habitations when so little expense and labor would transform them into real homes. It is so much easier to be cheerful among pleasing surroundings. Many of the prettiest and most satisfactory flowering plants are easily grown from seed, and are especially pleasing when tastefully arranged with regard to color, height, season of blooming, and to harmonize with surroundings.

There are no more satisfactory flowers than those grown from seed, especially the easily grown and brilliant flowered annuals.



Lilly's

Giant Crego ASTERS are valuable in the garden because they form a well-rounded compact plant from 2 to 2½ feet tall. The flowers are carried on long, strong stems and are produced in profusion so that they are well suited for cutting. They last a long time and bring a good price as cut-flowers.



Canterbury Bells, *Campanula*

Bellis

English Daisy

A favorite half-hardy perennial border plant much used for edgings, borders, and rock works. Pretty double flowers in white, pink and red are produced lavishly from early spring until well into the summer. They bloom the first year from seed and best results are obtained by growing new plants each year. Plants may be started indoors in February or March, or the seed may be sown in seed bed or permanent bed early in spring, but it is best to sow the seed in September and seed should be lightly covered with fine soil, well pressed down. Plants should be given some protection in the way of a light covering of straw during winter. They thrive best in a moist soil and cool atmosphere. The plants should be set about six inches apart.

No. 13.—**BELLIS**, *Perennis*—Mixed colors. Pkt., 10c; $\frac{1}{8}$ Oz., 45c

BLACK EYED SUSAN—See *Thunbergia*.

Blue Lace Flower

Didiscus

This annual flower is better for cutting than for garden decoration as the plants are not particularly showy. Arranged indoors with small foliage the blooms display their charms to advantage. The flower heads are made up of small, azure blue flowers produced in umbels like those of the Wild Carrot. The stems are hairy and about 2 feet in length. July and August is the time of bloom. Sow the seed outdoors in the fall or early spring, or indoors early in February and give each plant at least a foot of space when transplanting to the garden.

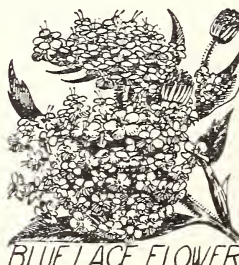
No. 1184. **BLUE LACE FLOWER**—Azure Blue. Pkt., 10c; $\frac{1}{4}$ Oz., 50c



BALSAM



BELLIS



BLUE LACE FLOWER



CALENDULA

Balsam

Lady Slipper

A native of India, the garden balsam loves a hot sun, rich soil and plenty of water. The young plants are quick, sure growers and from seed sown in the open ground in May soon form handsome bushes thickly massed with large, rose-like flowers. Transplanting two or three times has a tendency to dwarf the plants into better shape and make the flowers more double. They should be given plenty of space to develop, and should not be planted closer than twelve to eighteen inches each way. The flowers are produced on the under side of the leaves or inside the plants and show to the best advantage when planted in the margin of groups or to crown a terrace. For early bloom the seed should be sown in March in a gentle hotbed or in the house, and when large enough transplanted to other boxes or pots, and to the permanent bed when danger of frost is past. An abundance of sunlight and water is required.

No. 141. **Balsam**, Double—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

BATCHELOR BUTTONS—See *Centaurea*.

Cacalia

Tassel Flower

This brilliant orange-scarlet flowered annual is worthy of a place in any garden. It is not large, but the dash of color it provides is noticeable. It is much admired in mixed bouquets. The flowers are actually like tassels borne on long stems. Culture is simple. Sow the seeds outdoors in the fall or early in the spring and thin the plants to stand four to six inches apart. Sometimes catalogued and known as *Emilia* or *Flora's Paint Brush*. Plants remain in bloom from early summer until autumn. Fine for cutting. Height 1 $\frac{1}{2}$ feet.

No. 1176. **CACALIA**—Orange scarlet.

Pkt., 10c; $\frac{1}{4}$ Oz., 50c

Calendula

Pot Marigold

A hardy annual, about a foot high, blooming freely and earlier than the marigold. The coloring of the large showy flowers ranges through all the shades of yellow from ivory to deep orange. Should be planted eight to ten inches apart in masses or borders. It may be sown in the open ground in the fall and early in spring and will bloom continuously from early summer to late in the fall. Keep the faded flowers picked off if continued bloom is wanted. They self-sow. Height of plant, 1 to 2 feet.

No. 1200. **CALENDULA**, Orange King—Glowing orange in color, peony-like petals.

Pkt., 10c; $\frac{1}{2}$ Oz., 30c

No. 117. **CALENDULA**—Mixed colors.

Pkt., 10c; $\frac{1}{2}$ Oz., 25c

CALIFORNIA POPPY—See *Eschscholtzia*.

Calliopsis

One of the showiest and most easily grown of garden annuals, with graceful long stemmed flowers well suited for bouquets. The plants form perfect little bushes about two feet high and are a perfect mass of yellow maroon and brown flowers from early summer until killed by frost. Prefer sunny spot and sometimes self sow. Clip off seed heads to induce continued bloom. The best flower grown of brownish coloring. Sow in the fall or early spring, give plenty of room.

NOTE:—See Back Cover Collection.

No. 116. CALLIOPSIS—Mixed colors.

Pkt., 10c; ½ Oz., 25c

Canary Bird Vine

This is a rapid growing annual vine with canary-yellow blossoms resembling a bird with wings half expanded. The flowers are arranged in sprays. The plant is used to cover trellises, arbors and to screen unsightly places. Except for its deeply cut petals and lobed leaves its foliage resembles Nasturtiums.

Start the plants indoors in February, move them into individual pots as soon as large enough and transplant outdoors after all frost danger is past. Can also be started outdoors in the late spring. Rapidly reaches a height of 15 feet in warm weather.

Blooms from June to November.

No. 148. CANARY BIRD VINE, *Tropaeolum*.—

Yellow. Pkt., 10c; ½ Oz., 25c

Candytuft

Iberis

The Candytufts are among the best white flowers for edging beds, for planting in belts, beds, or massing for rockeries and for cutting. Several of the varieties are fragrant, and all are profuse bloomers. The seed should be sown outdoors in the fall or during March and April where the plants are to bloom, and well thinned when they have grown about an inch high. Make a second planting a month later, and a third late in July for fall flowers. September sowing will give winter-blooming plants. The soil for best results should be rich, and the plants given an abundance of water. They branch freely, and if some are removed the flowers will be larger. They self sow. Fall sown seed blooms early in June, spring sown in mid-summer.

No. 922. CANDYTUFT, *Empress*—A grand variety, producing large spikes of bloom resembling a white Hyacinth. The plant is about twelve inches high.

Pkt., 10c; ½ Oz., 25c

No. 39. CANDYTUFT, *White Rocket*—Good spikes of pure white flowers, six inches tall.

Pkt., 10c; ½ Oz., 25c

No. 1144. CANDYTUFT, *Umbellata*—Mixed colors. All the shades of pinks, reds, purples and white. Very effective, 12 to 20 inches high; good for cutting.

Pkt., 10c; ½ Oz., 35c



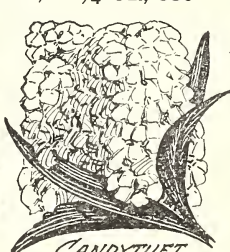
CALLIOPSIS



CANARY BIRD VINE



CANDYTUFT



CANTERBURY BELLS



Candytuft

Canterbury Bells

Campanula

These fine old plants are rich in color, profuse in bloom, and of easy culture. For outdoor effects, when planted in quantity, they are glorious, and the finest full-blown specimens can be transplanted to pots for house decoration by soaking the soil about them with water and lifting them with a ball of earth. They are biennials, and bloom the second year from seed, growing about three feet high and bearing a profusion of double and single varieties of bell-shape blue, white, purple and red flowers. The seed should be sown outdoors early in July, and the plants transplanted to cold frame in October, setting them six inches apart. In May they should be transplanted to the permanent bed eighteen inches apart. They like rich soil and good drainage.

No. 15. SINGLE CANTERBURY BELLS—Mixed colors. Pkt., 10c; ½ Oz., 45c

No. 157. DOUBLE CANTERBURY BELLS—Mixed. Pkt., 10c; ¼ Oz., 45c

No. 1082. SINGLE CANTERBURY BELLS—White. Pkt., 10c; ¼ Oz., 35c

No. 1083. SINGLE CANTERBURY BELLS—Blue. Pkt., 10c; ¼ Oz., 35c

No. 1084. SINGLE CANTERBURY BELLS—Pink. Pkt., 10c; ¼ Oz., 35c

Cardinal Climbers

The Cardinal Climber is a vine of great charm because of its fiery, cardinal-red, Morning Glory like flowers. The flowers are about 1½ inches in diameter and borne in clusters. The leaves are deeply lacinated, resembling those of a fine Japanese Maple. The vines grow 15 to 25 feet and are covered with scarlet flowers all season long. The seeds had best be soaked in tepid water for a day before planting.

No. 1127. **CARDINAL CLIMBER**—Crimson scarlet. Pkt., 10c; ⅓ Oz., 45c

Carnation

Dianthus

These splendid half-hardy perennials are very satisfactory garden plants west of the Cascade Mountains.

The Marguerite Carnations are probably the most satisfactory for outdoor culture, and may be treated as annuals. They require a rich soil and plenty of moisture.

No. 402. **CARNATION, Marguerite**—White. Strong growers; free flowering; especially desirable for garden culture.

Pkt., 10c; ¼ Oz., 60c

No. 161. **CARNATION, Double Grenadin**—A beautiful, early, dwarf variety. Sweet scented, double scarlet flowers.

Pkt., 10c; ¼ Oz., 95c

No. 284. **CARNATION, Marguerite**—Mixed colors. Pkt., 10c; ¼ Oz., 50c

No. 16. **CARNATIONS, Double**—Mixed colors. Pkt., 10c; ¼ Oz., 40c

CASTOR BEAN—See *Ricinus*.

Celosia

Cockscomb

An odd and picturesque decorative feature of the garden. The dwarf varieties make novel and attractive borders; the tall ones form striking groups. For winter bouquets they are cut before fully ripe, and dried in the house. They are hardy annuals. The seed may be planted in hotbed or in boxes or pots in the house in March or April, and the young plants transplanted to the garden in May, or the seed may be planted in the open ground in May.

No. 17. **CELOSIA, Cristata**—Mixed colors. About one foot high, bearing large, highly colored combs.

Pkt., 10c; ¼ Oz., 35c

No. 119. **CELOSIA, Pyramidalis Plumosa**—Mixed colors. Large flowers, feathered.

Pkt., 10c; ¼ Oz., 45c



Centaurea—Sweet Sultan

Centaurea

Corn Flower, Bachelor Button, Sweet Sultan

In this are embraced several quite distinct hardy annuals. They are of the easiest culture, grow about eighteen inches high, and are excellent for beds, borders, and cut flowers. The seed may be sown in seed bed or permanent bed either in fall or early spring. The plants should be set about four inches apart. If cut in bud they last 10 days. They prefer cool location and moist soil.

No. 923. **CENTAUREA, Dwarf Victoria**—A dwarf, double Bachelor's Button. The plants are only about nine inches high, bear a profusion of large, blue, double flowers, and are excellent for pots and edgings.

Pkt., 10c; ¼ Oz., 35c

No. 1085. **CENTAUREA, Blue Emperor**—Tall, single Cornflower, growing two feet

Pkt., 10c; ¼ Oz., 25c

No. 225. **CENTAUREA, Cornflower**—The old-fashioned Bachelor's Button. Ragged Sailor, or Bluebottle.

Pkt., 10c; ¼ Oz., 25c

No. 1016. **CENTAUREA, Giant Sweet Sultan**—(Imperialis). The finest of all Sweet Sultans for cutting, lasting a long time in water. Beautiful, artistic, sweet scented flowers, borne on long, strong stems.

Pkt., 10c; ¼ Oz., 25c



CARDINAL CLIMBERS



CARNATION



CELOSIA COCKS COMB



CHRYSANTHEMUM



Cosmos

Cobaea

Cup and Saucer Vine

This rapid growing vine is most attractive. Although not an annual it is so treated in the north. The vines attain a height of 30 feet. The dark color and refined character of its foliage, together with its bell-shaped flowers, render it a very satisfactory vine for covering broad areas. The flowers are not conspicuous, because of their modest colors and because they are hidden by the foliage, their form, however, is pleasing and they, unlike the moonflower, are open during the day. Blossoms are green at first, but change rapidly to a beautiful violet blue. They are followed by plum-shaped fruits. Sow the seeds indoors late in February or early March, one to a pot. Press them into the soil edgewise, as they are large and flat, and germinate poorly when placed broad side down. Transplant when frost danger is past into very rich soil. Thrives best when watered freely.

No. 120. COBAEA, Scandens—Purplish blue.
Pkt., 10c; ¼ Oz., 25c

COCKSCOMB—See Celosia.

CORNFLOWER—See Centaurea.

Cineraria

Tender perennial greenhouse and pot plants bearing profusely daisy-like flowers in white, blue, violet and crimson shades. The seed should be sown in flats in a greenhouse in January, merely pressing the seed into the soil and covering very lightly with finely sifted soil. Water with a fine spray. Transplant to small pots when large enough to handle, and shift to larger pots as the plants grow. They may be set outdoors in a shaded position when the weather is thoroughly warm. Water freely. Height, 1 to 2 feet.

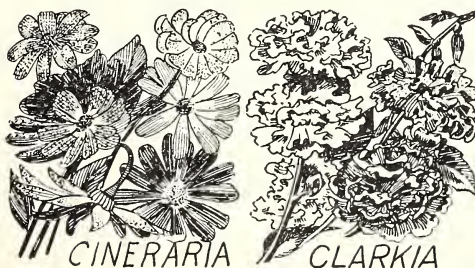
No. 19. CINERARIA, Hybrida—Mixed colors.
Pkt., 10c; ⅛ Oz., \$1.25

Clarkia

A pretty, hardy annual, native of the Pacific Coast and consequently blooming in its greatest perfection here. They are useful for bedding, borders, edgings and for hanging baskets. They grow about eighteen inches high, and bear bright rose, purple and white flowers from mid-summer until late fall, in profusion on long, graceful sprays. Seed should be sown outdoors in the fall or early spring. They thrive best on the sandier soils in either full sun or partial shade. Allow 7 to 9 inches between the plants. Splendid for cut flowers as all the buds open in water. Height, 2 to 2½ feet.

No. 1128. CLARKIA—Single and double, mixed colors.

Pkt., 10c; ¼ Oz., 25c



Chrysanthemum

Annual

The large-flowered types of chrysanthemums, which produce such gorgeous shows in the florists' stores, are not hardy, and must be grown in the greenhouse. The annual chrysanthemums bloom most satisfactorily if the seeds are sown early in a hotbed or cold frame and the young plants transferred to the open as soon as the soil has become sufficiently warm to keep them growing without check. They should be set ten inches apart in their permanent location. Somewhat less satisfactory results can be secured by sowing the seed in the permanent bed early in May, and thinning the young plants to eight inches apart. If the same care in regard to disbudding and pinching back is taken with the annuals as with the large flowered perennials the work will be rewarded by the greatly increased size of the flowers. Bloom profusely throughout the summer months and into the late fall. They like rich soil, plenty of room and pruning.

No. 1058. CHRYSANTHEMUM, Coronarium—Double mixed colors.

Pkt., 10c; ¼ Oz., 25c

Columbine

Aquilegia

Hardy perennial, very desirable and easily grown, forming large, permanent clumps. Blooms profusely early in the season and remains in bloom until very late. The flowers are exquisitely formed in various colors. Very desirable for borders or for groups among shrubbery. Height, 2 to 3 feet.

Columbines are excellent for rock gardens as well as for the herbaceous border where they make clumps sometimes two feet in diameter. They are somewhat difficult to arrange as cut flowers, but a truly exquisite effect is obtained by placing a single truss of bloom in a vase by itself. Plants can be started by sowing the seed in the open any time between April 1st and the middle of July, and they will bloom, profusely the following season. Warm, sandy soil is preferred.

No. 1177. COLUMBINE—Mixed colors.

NOTE—See Back Cover Collection.

Pkt., 10c; ¼ Oz., 50c

Cosmos

A favorite, late-flowering annual, especially adapted to the Pacific Coast, growing 3 to 4 feet high and bearing bright, bold flowers four inches in diameter. Most effective when planted in masses or background borders. Seed may be started in the house in March, or may be sown in the open ground in May, and the plants thinned to eighteen inches apart. When the plants are about a foot high the tops should be pinched out to induce a bushy growth. They prefer a rather light, not too rich soil, but do well almost anywhere. Keep well when cut.

No. 282. COSMOS—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 30c

No. 1032. COSMOS—White, early flowering. Pkt., 10c; $\frac{1}{4}$ Oz., 35c

No. 1033. COSMOS—Pink, early flowering. Pkt., 10c; $\frac{1}{4}$ Oz., 35c

No. 1034. COSMOS—Red, early flowering. Pkt., 10c; $\frac{1}{4}$ Oz., 35c

No. 1168. COSMOS—Orange, early flowering. Pkt., 10c; $\frac{1}{4}$ Oz., 50c

CRIMSON FLAX—See Linum.

CUP AND SAUCER VINE—See Cobaea.

Cypress Vine

This is one of the daintiest of vines, having fine, fern-like foliage and being dotted with small, star-shaped flowers—orange, scarlet and white in color. Very desirable for covering small ornamental trellises on account of its graceful foliage. Quite satisfactory also for growing indoors during the winter months. Grows 15 to 20 feet high.

The seeds should be scarified by cutting or filing the shell and soaked in warm water before planting because the shell is so hard that germination is slow or doubtful otherwise. Thrives best in light soil and sunny exposure.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about three times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding.

No. 1185. CYPRESS VINE—Mixed colors. Pkt., 10c; $\frac{1}{4}$ Oz., 25c

Dahlia

Although not generally known Dahlias are easily grown from seed. If planted early indoors and transplanted when danger of frost is past they will bloom the first season and make large bulbs by the next fall.

No. 1203. DAHLIA SEED—All varieties mixed, including many novelties.

Pkt., 10c; $\frac{1}{4}$ Oz., 50c

DAISY, AFRICAN—See Arctotis.

DAISY, ENGLISH—See Bellis.

DAISY, SHASTA—See Shasta Daisy.

Datura

Trumpet Flower

These large-flowered annuals are related to the common Jimson weed. The flowers are trumpet shaped, white, yellow, or purple and sometimes six inches long. The flowers are often much doubled and their fragrance is delightful. They prefer a light soil, a sunny sheltered situation and should be set at least 2 feet apart. Height about 3 feet. Seed can be started indoors early or in the open ground when frost danger is past. Cover seed to a depth of about 3 times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding. Give the plants plenty of room.

No. 1178. DATURA—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

Delphinium

Perennial Larkspur

Beautiful, hardy, border perennials with noble spikes of handsome flowers; very useful for cut flowers, etc. Sow in the spring or early in fall in seed beds or boxes and transplant when large enough. Delphiniums like plenty of sun. The soil should be rich, deeply prepared, a cool friable loam. Even hot, sandy soils, if watered and fertilized, will produce excellent results, moisture will increase the size of the flowers and spikes. Cultivate the plants constantly with the hoe. Sow out of doors after danger from frost is over, in beds of finely pulverized soil, covering the seed to a depth of not over four times their size, with light soil; press down with a board; thin out as it becomes necessary. Transplant into permanent position as soon as the seedlings are large enough so that they can be thoroughly rooted or established before cold weather, or sow in the early fall, carry the plants over in a cold frame, and transplant to permanent position in the spring.

No. 1129. DELPHINIUM, Belladonna—A lovely turquoise blue, which is a continuous bloomer. Splendid for cutting. This is the tall Delphinium so often seen in beds and borders and as cut flowers in the florist shops. Pkt., 10c; $\frac{1}{8}$ Oz., 90c

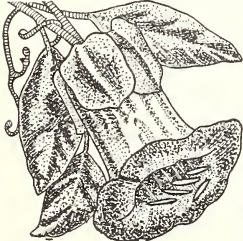
No. 1130. DELPHINIUM, Bellamosa—A rich deep blue in color and of the same type and habit of growth as the Delphinium Belladonna. The two grow beautifully together. Pkt., 10c; $\frac{1}{8}$ Oz., 90c

No. 1057. DELPHINIUM—Perennial mixed colors. Pkt., 10c; $\frac{1}{8}$ Oz., 75c

DIANTHUS—See Carnation, also Pinks.

DIANTHUS BARBATUS—See Sweet William.

DIDISCUS—See Blue Lace Flower.



COBAEA



COLUMBINE



CYPRESS VINE



DAHLIA

Echinocystis

Wild Cucumber

The Wild Cucumber is one of our fastest growing vines. Splendid for a quick, temporary covering for trellises, fences, stumps, etc. The foliage is light green, the flowers are white and appear in profusion during July and August and are followed by an abundance of long, spiny seed pods. They vary in height from 10 to 30 feet. The seeds may be sown in the fall. If sown in the spring they should be soaked for a day in warm water. They thrive in any soil. Scarifying the seed hastens germination. Cover to a depth of about one inch with fine soil.

No. 995. ECHINOCYSTIS—White.

Pkt., 10c; ½ Oz., 30c

ENGLISH DAISY—See Bellis.

Euphorbia Variegata

Snow on the Mountain

An annual garden plant growing two or three feet high bearing an abundance of beautiful green foliage, broadly marked with silvery-white and bearing small flowers. Very attractive and ornamental and can be planted as a background for lower plants or for use in mixed border. Seeds are best sown out of doors during the fall or in spring, after frost is over in places where the plants are to stand. Plants prefer heat and full sunshine but will grow on rather poor soil. Of open free-branching growth, three feet in height.

No. 1126. EUPHORBIA, Variegata—White.

Pkt., 10c; ¼ Oz., 35c

Eschscholtzia

California Poppy

The Eschscholtzia is the state flower of California and an annual of striking character, both as regards the form and color of its flowers, which are bright and rich in their tints of yellow, orange and mixed colors. The plants average about a foot in height, have attractive, silvery foliage, and produce their large poppy-like flowers quite lavishly from early spring until frost. They are most effective when grown in beds of considerable size, over which the seed may be thinly sown broadcast and lightly raked in. These sowings may be made early in spring, or late in autumn for earlier germination and bloom the next spring. The Eschscholtzia is also very useful as a pot plant and for cut flowers. In the garden they self-sow but do not transplant readily.

No. 192. ESCHSCHOLTZIA—True California Poppy—Orange-yellow.

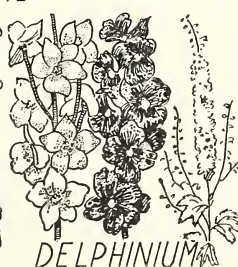
Pkt., 10c; ½ Oz., 25c

No. 1089. ESCHSCHOLTZIA—Special Mixed—All colors.

Pkt., 10c; ½ Oz., 35c



DATURA



DELPHINIUM



ECHINOCYSTIS



ESCHSCHOLTZIA

Digitalis

Foxglove

The tall flower-stem of the Foxgloves are particularly attractive when seen growing among shrubbery or in bold masses along walks or drives. They are perennials, blooming the second year from seed, growing three to five feet tall and producing long spikes of large flowers in various colors. Seed may be sown in the open ground in May and the plants transplanted to the permanent bed when large enough, or the next spring, setting them about two feet apart. When the center spike begins to fade it should be cut out and the side shoots will then grow more vigorously.

No. 165. DIGITALIS—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

No. 1086. DIGITALIS—White Gloxinia-flowered.

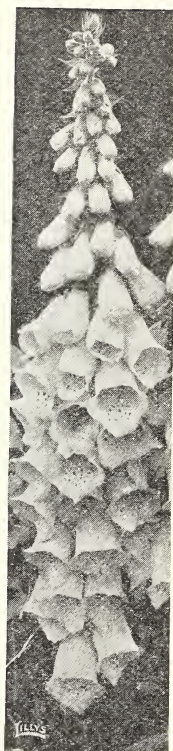
Pkt., 10c; ¼ Oz., 40c

No. 1087. DIGITALIS—Pink Gloxinia-flowered.

Pkt., 10c; ¼ Oz., 40c

No. 1088. DIGITALIS—Bright yellow Grandiflora.

Pkt., 10c; ¼ Oz., 50c



Forget-Me-Not

Myosotis

These dainty little flowers are hardy perennials, love cool, moist soils, and like pansies, bloom most freely in fall and early spring. They are good in borders, also satisfactory as winter-blooming plants in a cool room or cold frame. Sow the seed in early spring in a warm, sunny border. They bloom freely in the first season and profusely the second year. They grow about six inches high, and the plants should stand six inches apart.

No. 310. FORGET-ME-NOT, Victoria Dwarf—A very beautiful hardy biennial variety; of dwarf, bushy habit, bearing large clusters of the brightest azure-blue flowers on long, graceful stems, rendering them splendid for cutting.

Pkt., 10c; ½ Oz., 35c

No. 1054. FORGET-ME-NOT, Palustris—True Forget-Me-Not. A hardy perennial of strong, sturdy growth with beautiful clear blue flowers Pkt., 10c; ½ Oz., 75c



Gaillardia or Blanket Flower

Geum

Avens

A pretty perennial of low growth sending up flower stems two feet long. The flowers are double and measure two inches in diameter; rich orange-scarlet. Plants are of easy culture and bloom profusely over a long period. They mix well with dwarf growing perennial border plants and are adapted to rock gardens. The Geum is a most excellent flower to use for bouquets. When the flowers are cut they should be immediately immersed in water to prevent wilting.

Seed may be sown outdoors any time from early spring until fall. Blooms first year from seed if sown early. Pulverized soil, preferably light, sandy loam gives best results. Cover seed with fine soil about quarter of an inch deep and when plants are well established thin out or transplant to about eight inches apart.

No. 1131. GEUM—Mixed colors.

Pkt., 10c; ¼ Oz., 75c

EVENING GLORY—See Ipomoea.

EVENING SCENTED STOCKS — See Matthiola.

FLOWERING FLAX—See Linum.

FLOWERING SAGE—See Salvia.

FLOWERING TOBACCO—See Nicotiana.

FOUR O'CLOCK—See Mirabilis.

FOX GLOVE—See Digitalis.



Gaillardia

Blanket Flower

The Gaillardias are easily grown from seed. Sow seed in boxes during December or January and transplant when danger of freezing weather is past or sow seed in open ground in April. They grow in a compact, bushy form, about two feet high and the same in breadth, bearing freely until late in fall, large, brilliant flowers in red and yellow blended and shaded, on long slender stems. Splendid for borders and cut flowers and should not stand closer than one foot apart. They do best in light, well-drained, fertile soil, fully exposed to sun and air.

No. 444. GAILLARDIA, Single—Mixed colors.

NOTE—See Back Cover Collection.

Pkt., 10c; ¼ Oz., 30c

Godetia

Evening Primrose—Satin Flower

Free-blooming annuals, with widely opened flowers of satiny texture and delicate colors. Suited for beds or borders, for pots and to grow in shrubby borders in shaded places. They grow about eighteen inches high and bloom from early spring until frost. Colors red, pink and white, shaded and blended. Seed should be sown in the open ground in the fall or early in spring, in rather light or sandy soil, and thinned to one foot apart. They may be treated as biennials by sowing the seed in July and transplanting the young plants to a cold frame, to be placed in the open ground the following May. If soil is very rich all foliage and no flowers will result. They often self-sow. Plants get leggy and weak if crowded for room.

No. 1141. GODETIA—All varieties mixed.

Pkt., 10c; ¼ Oz., 35c

Gomphrena

Globe Amaryanth

Entirely different in appearance from any other everlasting flower, and very attractive. Has a globe-shaped flower.

The tiny Clover-like flowers of this plant may be amaranth (true purple), white or rose in color. The plants are annual and grow one to two feet tall. When fully developed cut and dry the flowers for winter bouquets. In the garden these flowers are most attractive when planted among white flowers which heighten their color by contrast. They do not blend well with other colors. Also good for fresh cut flowers. Plants should be set a foot apart.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed.

No. 1117. GOMPHRENA, Everlasting—

Mixed colors. Pkt., 10c; ¼ Oz., 25c

Gourds

Ornamental

Gourd plants are exceptionally free from insect pests. Plant them six inches apart. Do not transplant, but sow the seed where the plants are to grow. They are novel annual climbers with ornamental foliage and singularly shaped fruits which are often strangely colored and marked. In Japan the tough fiber on the inside is used for the soles of sandals. They grow 10 to 20 feet high.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about three times its size.

No. 1132. GOURDS—Ornamental, fruited.

Pkt., 10c; 1 Oz., 40c

Geranium

These grow quickly from seed and bloom profusely the first season. Should be started indoors about the first of the year and then transplanted to the open the end of April or during May. There is much pleasure watching them develop and the different sorts secured from seed is endless. Our seed is of superior strain and produces the finest largest blooms.

No. 1206. GERANIUM—Mixed colors.

Pkt., 10c; $\frac{1}{8}$ Oz., 75c

Helichrysum

Strawflower

The Strawflower is the largest and showiest of the annual Everlastings. The large double flowers range from white to yellow, crimson, pink, rose, chestnut and rich purple. The plants grow two to four feet tall. Remember to cut the blooms before they are fully open as even the small, undeveloped buds will open while drying. It is best to start the plants early indoors and transplant to the garden a foot apart when the weather has settled. They are attractive when grown in beds in the garden and keep well as cut flowers or dried for winter bouquets. The darker shades are the most showy when dried. Sow early in the spring, thin or transplant to one foot apart.

No. 1116. HELICHRYSUM, Everlasting—Mixed colors. Pkt., 10c; $\frac{1}{4}$ Oz., 35c

Hollyhock

These too frequently neglected old-fashioned perennials are most pleasing and attractive when seen in groups or long rows against hedges or shrubbery as a background and, in turn, form a very satisfactory background for plants of lower growth. Sow in January under cover and transplant to open ground as early as possible setting plants about eighteen inches apart or sow seed in September where plants are to remain. The plant is amenable to training, and if the tip of the main stalks is pinched off it may be kept at any desired height, and the side branches will then develop and form a bush.

No. 37. HOLLYHOCK, Double, Mixed—The best double perennial Hollyhocks in mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 50c

No. 961. HOLLYHOCK, LILLY'S Annual—Everblooming. This splendid variety is a hardy annual, and if planted early will begin blooming in July or August. The diversity of forms and colors among flowers affords many delightful surprises. Some of the flowers will be densely double, other semi-double, and others single, all being of the most beautiful colors and shades.

Pkt., 10c; $\frac{1}{4}$ Oz., 35c



GEUM



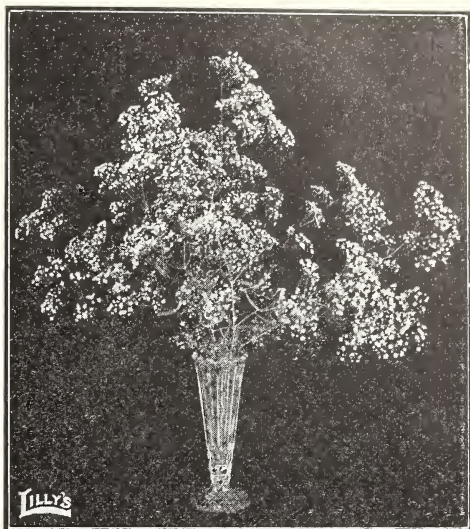
GODETIA



GOMPHRENA



GOURDS



Gypsophila or Baby's Breath

Gypsophila

Baby's Breath

Hardy annuals and perennials growing one to two feet high and producing a profusion of small star-shaped flowers, mostly white; useful for hanging baskets and for mixing with bouquets. Sow seed of the annual varieties either in fall or early in spring and at intervals for succession, either in beds, seed beds, boxes, or pots, and thin or transplant to about one foot apart. Seed of the perennial varieties may be sown in spring but it is better to sow in September and winter over in a cold frame.

The name "Gypsophila" means Gypsum loving, therefore, these plants prefer limestone soil.

There are both annual and perennial varieties which are graceful and delicate, and of special value for mixing with other flowers in bouquets.

No. 925. GYPSOPHILA, Snowflake, (elegans alba pura)—An improved large-flowering hardy annual variety, producing graceful sprays of pure white blossoms. Grows about two feet high.

Pkt., 10c; $\frac{1}{4}$ Oz., 20c; 1 Oz., 50c;
 $\frac{1}{4}$ Lb., \$1.25

No. 1090. GYPSOPHILA, Elegans Rosea—Soft pink. Hardy annual; two feet high.

Pkt., 10c; $\frac{1}{2}$ Oz., 25c

No. 918. GYPSOPHILA, Panticulata—Hardy perennial. White; two feet high.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

HELIANTHUS—See Sunflower.

Heliotrope



HELIOTROPE

Everyone loves the delightful fragrance and beauty of the Heliotrope, but few know that it can be raised from seed easily. To insure a long period of bloom the seed should be sown indoors during February and the plants set out, 12 inches apart in rich, well

prepared soil when the danger from frost is past. They thrive in a sunny location and require plenty of water when in bloom. To encourage a bushy growth pinch back the young main shoots. Cover seeds but $\frac{1}{8}$ -inch with fine, rich soil.

No. 1179. **HELIOTROPE**—Sweet scented.

Pkt., 10c; $\frac{1}{8}$ Oz., 40c

Hibiscus

Mallow Marvels

The perennial Mallows bear some of the largest flowers of any of our perennials and present a glorious sight when in bloom. The flowers resemble single Hollyhocks excepting that they are much larger, six inches across a single bloom is not unusual. Colors range from white with crimson centers to deep crimson. Foliage is a grayish green and plants grow four to six feet high and require much room. Will bloom the first year from seed if started early indoors. They transplant readily and prefer moist soil. Set three feet apart. They open only in full sunlight.

No. 1167. **HIBISCUS**—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 35c

Ipomoea

Moonflower Vine, Evening Glory

Rapid-growing, half-hardy annuals quickly attaining a height of ten to fifteen feet, producing a dense mass of heart-shaped leaves and a profusion of beautiful large flowers which open at sunset and close in the morning. The blossoms are in delicate, gorgeous colors and delightfully fragrant.

If seeds are notched or scarified and soaked in warm water for 24 hours before planting they will bloom six weeks from planting.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed.

No. 959. **IPOMOEA**, Evening Glory—Rose lilac.

Pkt., 10c; $\frac{1}{4}$ Oz., 30c

No. 1056. **IPOMOEA**, Moonflower—White.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

KOCHIA—See Mexican Firebush.



HELICHRYSUM



HIBISCUS



HOLLYHOCK



ICE PLANT

Ice Plant

Fig Marigold

This annual is a curious plant with thick leaves covered with glistening dots or ice-like globules. The flowers are white or light rose, but not showy. The plants are trailing or creeping and are seldom more than six inches tall. These plants are useful for rough spots in the garden where the soil is dry and the sun is very hot. Sow outdoors after the ground is warm. They require very little water. A very pretty and interesting plant for hanging baskets, rock work and edging.

No. 1180. **ICE PLANT**—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 35c

IMMORTELLE—See Xeranthemum.

Kudzu Vine

(Pueraria thumbergiana)

A twining vine of remarkable rapid growth, attaining a length of 40 to 50 feet in one season from established roots, hardy, though the vines die down every winter in the Northwest. Foliage is large and lobed; purple Pea-shaped flowers in clusters, borne late in the season. A fine vine for arbors, verandas, etc., easily grown from seed.

Sow when danger from frost is past in fine, rich soil $\frac{1}{4}$ -inch deep and keep moist until seeds germinate. Transplant 6 to 12 feet apart and train against a trellis, assisting the young shoots in their growth.

No. 1181. **KUDZU VINE**, Japanese—

purple. Pkt., 10c; $\frac{1}{4}$ Oz., 30c

LADY SLIPPER—See Balsam.

Larkspur

Delphinium

The annual varieties are quite hardy, and the seed may be sown in the open ground in the fall, and will germinate very early in the spring, or it may be sown early in spring. The tall varieties are suitable for shrubberies and borders, and the dwarf varieties for beds. Either are splendid for cutting. They bloom best in rather cool, moist soil. They should be thinned to stand six to eighteen inches apart, according to variety. There are also perennial varieties. Colors range from white to carmine, light pink, light scarlet, light blue and dark purple. They self sow.

No. 927. **LARKSPUR**, Dwarf Rocket—A splendid hardy annual Larkspur, growing only one foot high and producing large, double, hyacinth-like blooms in a variety of charming colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 30c

No. 208. **LARKSPUR**, Tall Rocket—A tall hardy annual Larkspur, growing about two and one-half feet high, mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 35c

Lantana

An exceedingly popular and rapid growing bushy plant, bearing large heads of Verbena-like clusters of fragrant flowers in a wide variety of changing colors. The blooms are succeeded by a profusion of green berries which change to deep blue when ripe. Half hardy perennial, best treated like an annual in the Northwest, 2 to 3 feet in height.

Seeds may be sown outdoors early in spring so that plants will bloom during late summer and fall or started in early fall plants will produce a profusion of blooms the following spring and summer. Flowers are orange, white, rose and other colors.

No. 1142. LANTANA—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

Lavender

Perennial. Mostly grown for the sweet-scented flowers which, when dried, are placed in linen closets and wardrobes to impart their delicate perfume to the linen and clothing. Delightfully fragrant. Flowers from June to August. Lavender is generally catalogued as an herb, principally used for its aromatic properties. Sow the seed early in spring, in light, mellow soil and cover lightly. When plants are 2 or 3 inches high, thin to a foot apart. Plants attain immense size after a few years.

No. 2000. LAVENDER—Sweet scented.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

Lobelia

These charming little half-hardy annuals grow four to six inches high, forming compact little bushes literally covered with small, bright flowers. For beds, edgings, baskets and pots there is nothing prettier. The seeds may be sown outdoors in early spring, thinning or transplanting the young plants four or five inches apart. There are also tall, perennial varieties.

No. 195. LOBELIA, Emperor William—

A very dwarf, compact, variety covered with white, blue-margined flowers from June to November.

Pkt., 10c; $\frac{1}{8}$ Oz., 50c

No. 1096. LOBELIA, Sapphire—A trailing variety, bearing very large deep blue flowers with a pure white eye.

Pkt., 10c; $\frac{1}{8}$ Oz., 45c

No. 196. LOBELIA, Crystal Palace—Compact plants, dark foliage, and rich deep blue flowers.

Pkt., 10c; $\frac{1}{8}$ Oz., 45c

No. 304. LOBELIA, Erinus Hamburgia—A trailing Lobelia, for hanging baskets or windows boxes. Large dark blue flowers.

Pkt., 10c; $\frac{1}{8}$ Oz., 40c

LOVE IN A MIST—See Nigella.

Linum

Crimson Flax

This is a very pretty dwarf annual. The rich crimson flowers last only a day, but they are borne continuously until frost. Makes a splendid subject for massing or may be planted as an edging. The annual Crimson Flax is truly beautiful and forms clumps in the



der where the glowing flowers are a delight of gracefulness. It grows about a foot and a half tall with wide, open, glossy bright flowers. The seed is perfectly hardy and may be sown outdoors in the late fall or early in the spring. Thin the plants to stand 4 to 6 inches apart. A succession of bloom is obtained by sowing additional seed several times during the season.

No. 1143. LINUM, Grandiflora Rubrum—Scarlet.

Pkt., 10c; $\frac{1}{2}$ Oz., 25c

Lupins

Free-flowering easily grown annuals, about two feet high, with long graceful spikes of rich and various colored pea-shaped flowers. Valuable for mixed borders, beds and for cutting. Does best in partial shade. As a border plant the Lupin is quite interesting; the cut flowers are exquisitely suitable for graceful bowl arrangements. Sow the seed late in the fall or very early spring, where the plants are to remain as they are difficult to transplant. Thin so the plants stand at least a foot apart.

No. 46. LUPINS—Annuals, mixed colors.

Pkt., 10c; $\frac{1}{2}$ Oz., 20c

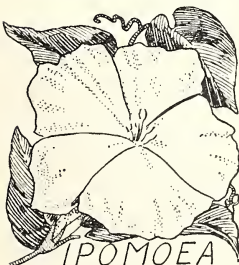
Mexican Firebush

Kochia

This most popular ornamental annual is also known as Summer Cypress. It is very quick growing, and may be sown in the open when the trees are coming out in leaf. The plants branch freely and are perfectly round. The foliage is fine and feathery and of clean, bright green color; early in the fall the bush takes on a deep carmine hue and finally turns to a fiery red. Hardy annual, height 2 to 3 feet. A very attractive plant at all times.

No. 1135. MEXICAN FIREBUSH, Tricophilla—Flaming red.

Pkt., 10c; $\frac{1}{2}$ Oz., 25c



IPOMOEA



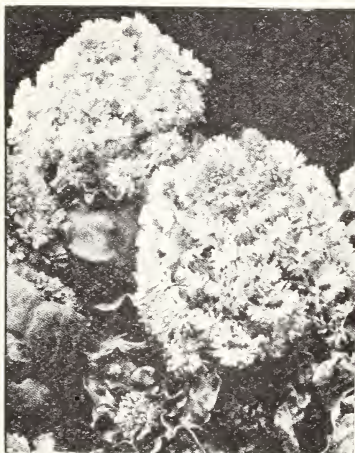
KUDZU VINE



LANTANA



LARKSPUR



Mignonette

Marigold

(Tagetes)

There are two distinct types of these garden annuals. The French marigolds are the most compact and regular in growth, and are useful for bedding. The African Marigolds are better suited for planting in mixed borders or among trees and shrubs. The seeds of either type may be planted in the open ground in April, but earlier bloom may be had by starting the plants in the house. They transplant readily and often self sow. A favorite combination for the table is Marigold and Larkspur. When most other flowering plants are becoming dry and brown in the fall the Marigolds show up in all their brilliance. They succeed best in light soil with full exposure to the sun. Either variety is splendid for cut flowers.

No. 409. MARIGOLD, Tall Double African—About two feet high with flowers three or four inches in diameter in shades of yellow and orange.

Pkt., 10c; $\frac{1}{2}$ Oz., 45c

No. 410. MARIGOLD, Tall Double French—The plants grow about one and one-half feet high. The colors and markings of the large double flowers are very interesting, some being elegantly striped and spotted.

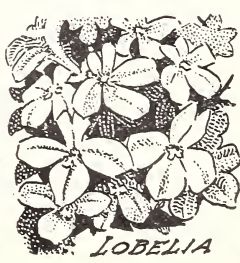
Pkt., 10c; $\frac{1}{2}$ Oz., 40c

No. 146. MARIGOLD, Dwarf Double French—One foot high, with large flowers in mixed colors.

Pkt., 10c; $\frac{1}{2}$ Oz., 50c



LAVENDER



LOBELIA



LUPIN



MARIGOLD

Mignonette

(Reseda)

No garden is complete without a plentiful supply of this hardy annual. The seed can be sown outdoors at any time after the middle of April, and if planted at intervals of three weeks until August, its fragrant, modest colored flowers may be gathered until November. It grows about one foot high, and should be thinned to eight to twelve inches apart. Does not transplant readily and when moving is necessary a large ball of earth should be moved with the seedling. Disbudding induces long spikes and stems. Prefers the cool weather of spring and fall.

No. 139. MIGNONETTE, Reseda Odorata—The old-fashioned, sweet-scented Mignonette.

Pkt., 10c; $\frac{1}{2}$ Oz., 25c

Matthiola

Evening Scented Stock

This annual from the old-fashioned garden has fragrance rather than beauty to recommend it. The flowers are dull, purplish-lilac and emit during the early morning, evening and after showers a delicious perfume perceptible at a considerable distance. It is well worth growing for this entrancing fragrance.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about three times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding. If started indoors, young plants should be transplanted to open after ground has become warm.

No. 1205 MATTHIOLA, Bicornis—Evening Scented Stocks.

Pkt., 10c; $\frac{1}{2}$ Oz., 35c

Mirabilis

Marvel of Peru, Four o'Clock

A perennial in warmer climates, but here it is treated as a hardy annual. It is a quick growing, erect, bushy herb, attaining a height of two or three feet and blooming during the late summer and autumn. The flowers are shaped like a Morning Glory, come in white, yellow, crimson and striped and open only late in the afternoon and on cloudy days. The seed should be planted in the hotbed or in the house in March and transplanted to the open ground in May, setting the plants about one foot apart. They sometimes manifest their perennial habit of developing tuberous roots sufficiently large to be lifted and stored like those of the Cannas. They often self mow.

No. 51. MIRABILIS, Jalapa—Mixed colors.

Pkt., 10c; $\frac{1}{2}$ Oz., 20c

Morning Glory

These well known hardy climbing annuals are rapid growers making from 4 to 20 feet of vine and are well covered with foliage and pretty flowers, making them useful for covering summer-houses, verandas or other structures where quick effects are desired. Soak the seeds several hours in luke-warm water and sow in a warm, sunny location in March or April. Allow plants to stand three or four inches apart. They are not readily transplanted and thrive best in full sunshine. They bear pretty flowers in a variety of colors and tints, fully expanded only in the morning.

Convolvulus Major is the old-fashioned Morning Glory; flowers are mixed colors.

The Giant Japanese or Imperial produces larger blooms of a greater variety of colors than the convolvulus.

No. 600. MORNING GLORY, Japanese Giant—Mixed.

Pkt., 10; Oz., 25c

No. 41. MORNING GLORY, Convolvulus Major—Mixed.

Pkt., 10; Oz., 25c

MOONFLOWER—See Ipomoea.

Michaelmas Daisy

Perennial Asters

No special culture is necessary. Plant them and if given extra food and water they will repay us; if not they bloom beautifully to shame us for our neglect. Of course, in the garden where neatness is necessary we do not stake the tall sorts. They seem to grow well either in full sun or partial shade. They are perennials and are easily started from seed planted after the soil has become thoroughly warm. The bloom period is the late fall when the clouds of bright colored blooms delight us. Height 2½ to 4 feet. Very useful as cut flowers.

No. 1081. MICHAELMAS DAISY—Mixed colors.

Pkt., 10c; ¼ Oz., 25c

MOSS ROSE—See Portulaca.

MOURNING BRIDE—See Scabiosa.

MYOSOTIS—See Forget-Me-Not.

Nigella

Love-in-a-Mist.—Devil-in-a-Bush

Compact, free flowering hardy annuals growing in bush form about one foot high. The foliage is finely cut and the flowers and seed pods are unique. Sow the seed outdoors during the late fall or in spring after danger of frost is past, and at intervals during the summer for succession. For early blooms the plants may be started indoors early in spring, or the seed may be sown in fall and the plants wintered over in a cold-frame. They often self sow, however, and the plants begin to bloom when quite small.

No. 248. NIGELLA, Damascena—Blue and white.

Pkt., 10c; ¼ Oz., 25c



MEXICAN FIREBUSH MICHAELMAS DAISY



Morning Glory

Nemophila

Baby Eyes

These small, dainty annual plants from California are of a spreading habit and the leaves are pale green, deeply cut and slightly hairy. The flowers are cup-shaped, white, and blue with white centers. The plants grow a foot tall and are profuse bloomers throughout the summer. Excellent for edgings and low groups in the border. They are best grown in partial shade and moist soil and their long season of bloom commends them for every garden. Sow the seed in the open in the late fall or early spring where the plants are to remain and thin to 6 or 8 inches apart. Sow at intervals of three weeks for a succession of bloom.

No. 1145. NEMOPHILA—Mixed colors.

Pkt., 10c; ½ Oz., 25c

Nicotiana

Flowering Tobacco

The evening fragrance of Nicotiana is most delightful; in addition the flowers are attractive in form and color which ranges from creamy white and pink to violet and crimson. The flowers are borne in great profusion on long stems. The foliage is abundant and forms a cluster about the base of the plant. They are slender in growth and show off best with a background of taller plants. The seed is very tiny and should be sown carefully. The seedlings make slow growth unless started in hotbed or sunny window. The soil should be rich and well pulverized. Height about three feet, plant to stand a foot apart.

No. 1146. NICOTIANA, Sanderae—Mixed colors.

Pkt., 10c; ¼ Oz., 25c



MIRABILIS



NEMOPHILA

Dwarf

Nasturtiums

Tall

No other annual will produce such a profusion of flowers for so long a time with the same outlay of time and labor. They bloom profusely during the entire season from early summer until killed by frost, and will thrive almost anywhere, and under almost any conditions. They produce the best blooms if the soil is not too rich, and require very little moisture. Rich soil and too much water will produce luxuriant foliage at the expense of flowers.

The dwarf or Tom Thumb varieties have a neat, compact habit of growth, forming a small, round bush about a foot high, with attractive foliage, and a profusion of large flowers nestled in among the green leaves. The seed should be planted about one inch deep, after the weather is thoroughly settled

in spring, in the position in which they are to remain. If the seed is planted thinly it will not be necessary to thin the plants, as they will stand considerable crowding. A few plants may be started in pots in the house in early spring and transferred to the open ground when warm weather has come to stay, if early blooms are desired.

The tall varieties grow about five feet high and are splendid for covering fences, walls, steep banks, or other unsightly places. The flowers are a little larger than those of the dwarf varieties.

Nasturtiums are not troubled with any disease or insect pests. The seeds and pods may be pickled, and the leaves are used like cress in salads.

No. 87. JILLY'S NASTURTIIUMS, Dwarf Mixed—The choicest standard dwarf varieties and colors mixed. Splendid for beds and borders.

Pkt., 10c; Oz., 15c; $\frac{1}{4}$ lb., 50c;
1 lb., \$1.50

No. 262. JILLY'S NASTURTIIUMS, Tall Mixed—A splendid mixture of the best tall varieties, including all harmonizing colors.

Pkt., 10c; Oz., 15c; $\frac{1}{4}$ lb., 50c

No. 929. NASTURTIIUMS, Queen of Tom Thumb—Rich, bright, crimson flowers forming a pretty contrast to the silver variegated foliage. Splendid for bedding or pots.

Pkt., 10c; Oz., 25c

No. 1071. NASTURTIIUMS, Dwarf, Ivy Leaved—Mixed colors. Deep green leaves of distinctive ivy form; flowers beautifully fringed.

Pkt., 10c; Oz., 25c

No. 1062. NASTURTIIUM, Tall Ivy Leaved—Mixed. The leaves resemble English ivy. The flowers are of a distinct form and in a great variety of colors.

Pkt., 10c; Oz., 25c

Portulaca

Sun Plant—Moss Rose

This bright flowered, thick-leaved annual is unrivaled for brilliancy among plants of low growth. It flourishes under extremely adverse conditions, even in hot sun and light soil and with sparse water supply. It is satisfactory for beds, edgings and rockwork, and for filling up spaces in flower beds, also as an undergrowth for taller plants. It is particularly useful in the Northwest. The seed does not germinate until hot weather, and should be sown late. Beyond sowing the seed, little care or attention is required. The seed should be pressed into the ground, not covered. Desirable for beds, embankments or rockeries. Predominating colors are clear yellow, white, scarlet, crimson, orange and rose.

No. 69. PORTULACA, Single—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 35c

No. 70. PORTULACA, Double—Mixed colors.

Pkt., 10c; $\frac{1}{8}$ Oz., 50c



Pansies

The pansy is a hardy perennial, requiring a cool, moist climate, and for that reason attaining the highest state of perfection west of the Cascades, where the largest and brightest blooms are produced in the greatest profusion and continuously from early spring until late in the fall. It is a favorite with everyone, and gives satisfactory results with a moderate amount of care. For early outdoor bedding, the seed is sown late in August or early in September in rich garden soil, in a cool location, and as soon as the plants are large enough to handle they are transplanted four inches apart in cold-frames.

Satisfactory results for the home garden, although not as early blooms, may be had by sowing the seeds in cold-frames in early spring, so that they will have a good root system before hot weather.

There are four essentials for the best results. First, good, rich, loamy soil that will hold moisture well. Never allow the beds to become dry. Any dryness after the seeds sprout is absolutely fatal. Second, frequent cultivation, to keep a dust mulch on the surface and to allow circulation of air in the soil. Third, to pick all blossoms as soon as they are past their prime as they will be larger and more perfect as the season advances if seed-pods are not allowed to form. Fourth, plant in a cool position. Frequent applications of Morcrop, cultivated into the soil, will be very beneficial.

No. 89. PANSY, Fine English—Finest varieties and colors of English Pansies Mixed. The plants are of compact habit.

Pkt., 10c; ¼ Oz., 50c

No. 90. PANSY, Giant Flowered French—A fine mixture of large flowering French varieties.

Pkt., 10c; ¼ Oz., 60c

No. 92. PANSY, Giant Trimardeau—Mixed colors. A splendid type of immense size, distinct shape and beautifully marked. The plants are deep rooted, enabling them to withstand drought, hardy and robust.

Pkt., 10c; ¼ Oz., 75c

No. 94. PANSY, Beaconsfield—A very large Pansy, with upper petals light lavender and lower petals purple.

Pkt., 10c; ¼ Oz., 75c

No. 203. PANSY, Emperor William—Dark navy blue; of large size and very showy.

Pkt., 10c; ¼ Oz., 75c

No. 95. PANSY, Snowflake—Large Satiny-white flowers with light centers.

Pkt., 10c; ¼ Oz., 75c

No. 178. PANSY, Faust, or King of the Blacks. Very large and very dark, almost black.

Pkt., 10c; ¼ Oz., 75c

No. 429. PANSY, Goldelse, or Yellow Gem. Pure golden-yellow; large.

Pkt., 10c; ¼ Oz., 75c

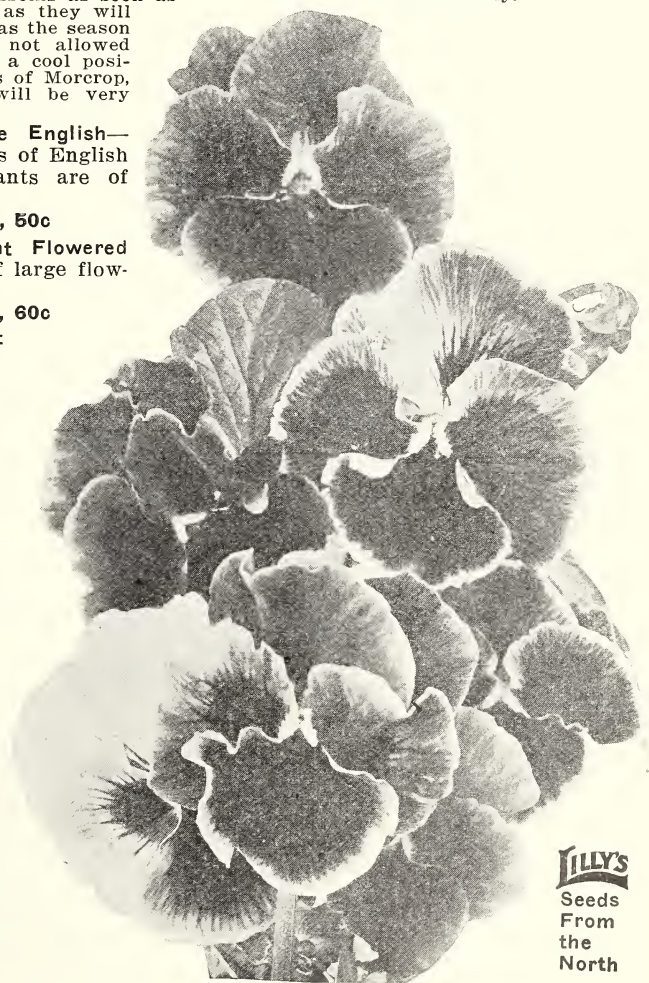
No. 1147. PANSY, Maroon, as named, very large.

Pkt., 10c; ¼ Oz., 75c

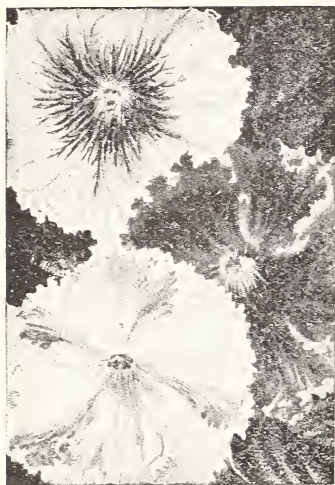
No. 930. JILLY'S PANSY, Colossal Mixture—Is a splendid mixture of the choicest large-flowering varieties and the most beautiful colors and markings.

Pkt., 10c; ¼ Oz., 50c

In transplanting the seedlings grown from a packet of mixed annuals do not make the mistake of selecting only the largest plants lest you, in that manner, select only one color from the mixture. Some varieties in the mixture are bound to be hardier and thrifter than others. Often the sorts slow to start are later productive of the choicest blooms. Also many times the rank growing seedlings do not flower freely.



JILLY'S
Seeds
From
the
North



Petunia

Petunia

A tender perennial, of several distinct types variously adapted for greenhouse and pot culture and for open air. The seed should be sown in March, in a gentle hot-bed, cold-frame, or in a box in the house, and the seedlings transplanted about a foot apart, in rich garden loam, after all danger of frost is past, and the ground has become thoroughly warmed. The seed should not be covered as most other seeds, but should be merely sown on the surface, and pressed slightly into the soil. The double varieties are more difficult to grow than the single varieties.

No. 61. **PETUNIA, Choice Single**—A choice mixture of fine single varieties and colors.

Pkt., 10c $\frac{1}{4}$ Oz., 45c

No. 1148. **PETUNIA, Giant or California**—Special strain of this favorite new type flower, mixed colors.

Pkt., 25c; 1-32 Oz., \$3.50

No. 1149. **PETUNIA, Double Giants**—Full and double, deeply fringed and waved, none finer on the marked, mixed colors.

Pkt., 25c; 1-16 Oz., \$4.00

PERENNIAL ASTER—See Michaelmas Daisy.

Pinks

(Dianthus)

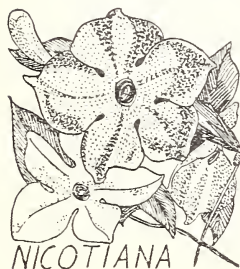
The large and varied genus of *Dianthus* contains some of our most beautiful flowers. The most of them are hardy perennials that bloom freely the first season, the plants remaining green all winter and blooming the next year if protected by a mulch. Old plants flower the earliest, but as young ones give the best flowers, new plants are usually grown each year. Seed is sown in the hot-bed or in the house in February, and the young plants transplanted out of doors, six to ten inches apart, in April or May. Late fall planting out of doors is also practical with good success. They do best in a well-drained bed made up of turfy loam, leaf mold, and well-rotted manure, thoroughly mixed. They will not stand too much moisture, and are more liable to winter-kill from being planted in a wet place than from cold.

No. 288. **MAY PINKS**—The old-fashioned single flowered garden or border Pink. They are hardy annuals, and will flower the first season from seed sown outdoors in spring. Height, one foot, mixed colors.

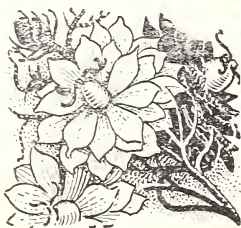
Pkt., 10c; $\frac{1}{4}$ Oz., 40c

No. 1150. **CHINESE PINKS**—Double mixed. They are strong growers and unexcelled for borders, beds or for cutting. 10 to 16 inches high.

Pkt., 10c; $\frac{1}{4}$ Oz., 35c



NICOTIANA



NIGELLA



PHLOX



POPPY

Phlox

The annual phlox, sometimes called flame flower, is particularly useful and attractive when grown in masses or ribbon beds of contrasting colors. Few annual plants are more easily grown from seed, give a quicker return of bloom, or offer such a variety to choose from as do the phloxes. The year's first sowing of seed should be made in the fall or very early in spring, and later ones in May, either where the plants are to bloom or in a seed bed as the phlox transplants readily. In transplanting, set the taller kinds about a foot apart; if planted too thickly they suffer from mildew. The removal of flowers and seed-pods makes the plants more bushy and compact and lengthens their blooming period.

No. 919. **JULY'S PHLOX, Large Flowering**—(Phlox Drummondii Grandiflora.) This is the finest type, having the largest heads of bloom and the largest individual flowers. This mixture contains all the most beautiful colors and shades. Fifteen inches high.

Pkt., 10c; $\frac{1}{4}$ Oz., 50c

No. 67. **PHLOX, Drummondii**—Flowers are not so large as those of the grandiflora type, but just as bright and free blooming. Fifteen inches high, mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 45c

No. 1133. **PHLOX, Perennial**—Mixed colors. A very handsome variety of Phlox quite different from the annual.

Pkt., 10c; $\frac{1}{4}$ Oz., 75c

Pyrethrum

Single flowering perennial hybrid Pyrethrum, popularly called Painted Daisies because of the many shades of rose, flesh, pink, white, crimson, etc., in which its daisy-like flowers are produced. Blossoms are large, often 3 to 4 inches across, borne in profusion on stems about 2 feet long. They remain in bloom a long time.

Seeds may be sown outdoors early in spring, so that plants will bloom during late summer and fall or started in early fall plants will produce a profusion of blooms the following spring and summer.

No. 1187. **PYRETHRUM, Hybridum Single**—Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 60c

No. 76. **PYRETHRUM, Partheni-Folium Aureum**—One of the best plants of edging, grown for its beautiful yellow foliage. Known also as Golden Feather, it is a hardy perennial, but is generally grown as an annual. Six inches high.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

POT MARIGOLD—See *Calendula*.

PURPUREA—See *Rudbeckia*.



Pinks or Dianthus

Poppies

No other plants possesses so bold and brilliant a flower, coupled with the same grace of stem, delicacy of tissue, and earliness and continuity of bloom as the poppy. For beds and borders, with a background of green, there is nothing which will produce a more striking contrast. A sandy loam suits them best, and as their strong tap-roots are difficult to transplant, it is well to sow the seed where the plants are to bloom. The seeds should be sown thinly, covered very lightly, and the young plants thinned to one foot apart. A long succession of flowers may be had by planting the seed in the fall and at intervals during the spring.

No. 314. **SHIRLEY POPPY**—A charming hardy annual with large fluted and crinkled flowers in a variety of forms and colors. If cut before the blooms are fully opened they will keep fresh in water several days.

Pkt., 10c; $\frac{1}{2}$ Oz., 25c

No. 58. **UMBROSUM POPPY**—Rich vermillion flowers with a black spot on each petal. Hardy annual.

Pkt., 10c; $\frac{1}{4}$ Oz., 40c

No. 341. **ICELAND POPPY**—This is a hardy perennial, but will bloom the first year from seed. It bears a profusion of graceful, delicate, single flowers with petals like tissue paper. Mixed colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

No. 1030. **ORIENTAL POPPY**—Mixed Hybrids. Hardy perennials, producing immense flowers in gorgeous colors.

Pkt., 10c; $\frac{1}{4}$ Oz., 45c

No. 351. **MIXED POPPIES**—A choice mixture of hardy annual varieties.

Pkt., 10c; $\frac{1}{2}$ Oz., 25c

No. 1114. **FLANDERS POPPY**—Bright scarlet. The Memorial Poppy from the fields of Flanders.

Pkt., 10c; $\frac{1}{4}$ Oz., 25c

No. 1151. **POPPY, Mixed Double**—Annuals. All varieties.

Pkt., 10c; $\frac{1}{2}$ Oz., 25c

Primrose

Primula

These half-hardy perennials are splendid for winter and spring decorations in the home or conservatory. The hardy varieties are used for beds and borders and may be handled in the same manner as pansies.

Sow seed indoors in boxes from April to July to insure flowering the following winter. Cover seeds very lightly with finely pulverized soil. When seedlings are well up, transplant to other boxes or pots and keep in a cool place. Plants thrive best in a mixture of leaf mold, sand and loam. Seed may also be sown in fall.

No. 75. **PRIMULA, Veris**—A beautiful hardy perennial, growing six inches high, and bearing clusters of fragrant flowers in various colors.

Pkt., 10c; $\frac{1}{8}$ Oz., 75c



PORTULACA



PRIMROSE



PYRETHRUM



RHODANTHE



Ricinus or Castor Bean

Ricinus

Castor Oil Bean

A tall, majestic, foliage plant with broad, ornamental palm-like leaves of glossy green or bronzed metallic hue and long spikes of scarlet or green. Grown singly it forms a picturesque pyramid of gorgeous leaves, which together with its brilliantly colored seed pods, makes of the whole a truly tropical picture. Height, 6 to 15 feet.

Sow seed 2 inches deep during late spring, or plants may be started indoors early in the year. Set out or transplant to about 4 feet apart.

No. 140. RICINUS, Castor Oil Bean.

Pkt., 10c; Oz., 25c

ROCK CRESS—See Arabis.

Salvia

Flowering Sage

Half-hardy perennials, blooming the first season. One of the most stunning and brilliantly colored of all garden flowers. Their compact bushes are literally ablaze with brilliant, intense scarlet spikes, often 8 to 12 inches long, from midsummer until the late fall. Height, about 3 feet.

Sow seed outdoors in well pulverized rich soil after all danger from frost has passed, covering seed to a depth of about 3 times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding. If started indoors, young plants should be transplanted to the open after ground has become warm and the weather thoroughly settled.

No. 920. SALVIA, Splendens.

Pkt., 10c; 1/8 Oz., 35c

Rudbeckia

(Purpurea)

A beautiful showy, hardy perennial, producing an abundance of large, handsome, crimson-purple flowers with dark central disc. Good for massing, growing 3 to 4 feet high. Blooms from early summer till late fall and often, after through blooming, if plants are cut back and kept well watered they will produce a second bloom. These flowers are fine for cutting. The leaves are large and thick. They will tolerate dry, sun-baked locations, but are better in good soil. Wait until the soil is good and warm before planting the seed. When 2 inches high, thin to 6 inches apart. Seed can also be sown in fall. There are usually no flowers until the second season, unless started very early under glass and transplanted when blooms may be had in autumn. Old roots may be divided and reset each spring.

No. 1169. RUDBECKIA—Purple cone flower.

Pkt., 10c; 1/4 Oz., 25c

Rhodanthe

Swan River Everlasting

The Rhodanthe is one of the slender-stemmed annual Everlastings. The flowers are rather bell-shaped, pink and white, and smaller than those of Helichrysum. The plants grow a foot tall and are dainty and graceful, but not showy. For small basket and vase arrangements during the winter these little flowers are charming. The flowers hang like little bells on the stems and make a pleasing and dainty cut flower either fresh or dried. Blooms in pink, white and dark red shades. The Rhodanthes are lovers of hot weather. When blooms are cut before being fully expanded and dried in the shade, they will retain their colors for years. The seed, if sown outdoors, should be planted only when the soil and air are warm. It is better not to move the plants but to thin them to stand six inches apart.

No. 1138. RHODANTHE, Everlasting—Mixed colors.

Pkt., 10c; 1/4 Oz., 30c

Salpiglossis

Painted Tongue

Very showy half-hardy annual bedding or border plants growing two to three feet high and bearing richly colored funnel-shaped flowers. For early bloom, plants should be started indoors in March and transplanted to the bed, one foot apart, when the weather is warm and settled. Seed may be sown outdoors when danger of frost is past. The seeds are extremely fine and should be planted with care. If the centers of the young plants are pinched out it will cause them to branch. Sandy soils are best suited to Salpiglossis, but they do well in partial shade. Desirable for bouquets as the blooms keep well in the water after being cut.

No. 406. SALPIGLOSSIS—Mixed colors.

Pkt., 10c; 1/4 Oz., 35c



RUDBECKIA



SALPIGLOSSIS



SALVIA



SCABIOSA

Schizanthus

Poor Man's Orchid

When in full flower, the foliage is practically hidden by the innumerable butterfly-like blooms which range in color from pure white through shades of cream and pink to crimson and mauve. These make excellent pot plants. Sown indoors early in January in pots of rich soil they will form large, compact bushes over 2 feet high, completely covered with beautiful small flowers. Easily forced in a cool greenhouse during winter time. Sow outdoors in the fall or spring. They do not transplant readily. It is, therefore, wise to move the seedlings while young with a considerable amount of earth. The plants naturally grow straggling and should be pinched back to make them bushy. Thrives best when situated in a slightly sheltered location.

No. 1152. SCHIZANTHUS, *Wisetonensis*—Mixed colors.

Pkt., 10c; 1/4 Oz., 50c

SNAPDRAGON—See *Antirrhinum*.

SNOW ON THE MOUNTAIN—See *Euphorbia*.



Sweet William

Statice

Sea Lavender

Statice is a popular perennial Everlasting growing two and a half feet tall. Extensively used for rockeries and borders, the panicles of the graceful minutes flowers of the "everlasting" type, can be dried and used for winter bouquets. Flowers are purple, yellow or white. The Statice lend the same grace to a bouquet as does Baby's Breath as the flowers are small and are produced in great profusion in a mist-like mass of airy gracefulness. They are most effective if combined with other straw flowers in bouquets. They thrive in warm, light soils. Sow seed thinly in hotbed or sunny window, just deep enough to cover the seed. Transplant carefully and exercise care in watering. Stems are often weak and require staking. Allow the flower to dry on the stems before cutting.

No. 1139. STATICE, *Latifolia*, Everlasting—Mixed colors.

Pkt., 10c; 1/8 Oz., 25c

Scabiosa

Mourning Bride

Quite hardy plants, flowering freely in cool locations or during the late summer and fall months. The seed should be sown thinly in shallow drills early in spring when the trees are starting out in leaf. When well started, thin out or transplant to stand 6 inches apart. The tall sorts form compact, rounded plants of dark green foliage, 8 to 10 inches in height. The flowers are borne on tall, slender, but quite stiff stems, nearly 2 feet in height, and are of fine rounded, full-centered form, composed of small tubular petals from which project the small pistils, giving them a feathery appearance. These are succeeded by curious hairy seed-pods. Its great succession of richly colored blossoms, borne on long stems, make it one of the most decorative of all garden flowers. Blossoms last for about a week after being cut.

No. 1134. SCABIOSA—Tall mixed.

Pkt., 10c; 1/4 Oz., 20c

NOTE: See Back Cover Collection.

Stocks

The plants are vigorous, have a good habit of growth, fragrant flowers in various colors, are adapted to bedding, edging, pot culture, house or conservatory use, and are splendid for cutting. They are hardy annuals, grow about two feet high and should be planted about one foot apart. For early blooms, the seed should be sown in the hotbed or in the house, in March, and when the plants are one inch high they should be transplanted to another part of the hotbed. Frequent transplanting during their early growth will give them a more dwarf and compact habit. Seed may be sown outdoors in April or May, and will produce blooms in July or August. If plants that began to bloom late are carefully lifted and potted in the fall, they will flower freely in a house or room that is rather cool and moist. Stocks enjoy a well-enriched soil thriving best in cool moist locations. Pinching back some of the plants makes them branch and lengthens the period of bloom.

No. 84. STOCK, Large Flowering—Dwarf Ten Weeks, mixed colors. Half hardy annual, 1 foot high.

Pkt., 10c; 1/8 Oz., 45c

No. 1107. STOCKS, Large Flowering—Dwarf Ten Weeks, white.

Pkt., 10c; 1/8 Oz., 50c

No. 1108. STOCKS, Large Flowering—Dwarf Ten Weeks, flesh-pink.

Pkt., 10c; 1/8 Oz., 50c

No. 1109. STOCKS, Large Flowering—Dwarf Ten Weeks, crimson.

Pkt., 10c; 1/8 Oz., 50c

No. 1110. STOCKS, Large Flowering—Dwarf Ten Weeks, light blue.

Pkt., 10c; 1/8 Oz., 50c

No. 1111. **JULY'S** ANNUAL STOCKS, Special Mixture—Choicest varieties and colors of annual Stocks.

Pkt., 10c; 1/8 Oz., 40c

NOTE: See Back Cover Collection.

STRAW FLOWER—See *Helichrysum*.

LILLY'S SWEET PEAS

Giant Waved Spencers

These most beautiful of the hardy climbing annuals, are very easy to grow, and thrive under ordinary garden conditions with very little care, but a little extra care will be amply repaid in larger and earlier blooms and brighter colors. The climate of the Pacific Coast is ideal for their best development, and in no other locality will they produce blooms in such wonderful profusion and perfection.

On the Pacific Coast, where the ground does not freeze to any depth, the best time

to plant is in November. They will apparently make very little growth during the winter, and it is better if the tops do not show above the ground until spring, but they will make a remarkable amount of root growth which will induce a strong growth of vines early in spring, producing better blooms and much earlier than if planted in spring. They may, however, be planted in February, March or April, and will do very well.

The location should be open, away from trees and shrubbery, where they will get plenty of sunlight and air. They will thrive on any good garden soil, but a rich clay loam will produce the brightest colors. The ground should be well drained, especially if planted in the fall. A heavy application of Morcrop Fertilizer should be spaded under and thoroughly mixed with the soil, to improve the mechanical condition and make it warm and porous and if the seed is planted in the fall the ground should have a mulch of straw or lawn clippings to protect it from the cold, keep it from packing, and to induce early growth in the spring. The seed should be planted about one inch apart in furrows; if planted in the fall the furrows should be five inches deep if planted in the spring they should be from two to four inches deep; early planting should be deeper than late plantings. Early in spring, if there is a hard crust on the ground, break it by raking over the rows. As soon as the plants are up cultivate frequently, and thoroughly. An occasional top-dressing of Morcrop Fertilizer will be beneficial.

As they grow six to eight feet high, they require a trellis of some sort, and six-foot poultry netting makes a fine support and is easy to construct. They require considerable water, and it should be applied to the roots only; do not sprinkle the foliage. All of the blossoms should be picked each day; otherwise they will go to seed, and stop blooming. The more flowers you pick the more new ones will appear.

We offer 35 Splendid Varieties. All your favorite colors are listed so that you can have "your shades" in profusion.

Each of these varieties has unusual merit and are our selection from the hundreds of sorts offered by Sweet Pea breeders.

Price, Any Named Variety

Pkt., 10c; Oz., 30c

No. 1194. **BARBARA**—Fine soft salmon, very pretty.

No. 949. **COUNTESS SPENCER**—The favorite rose pink.

No. 1003. **KING EDWARD**—Deep crimson, the favorite red.

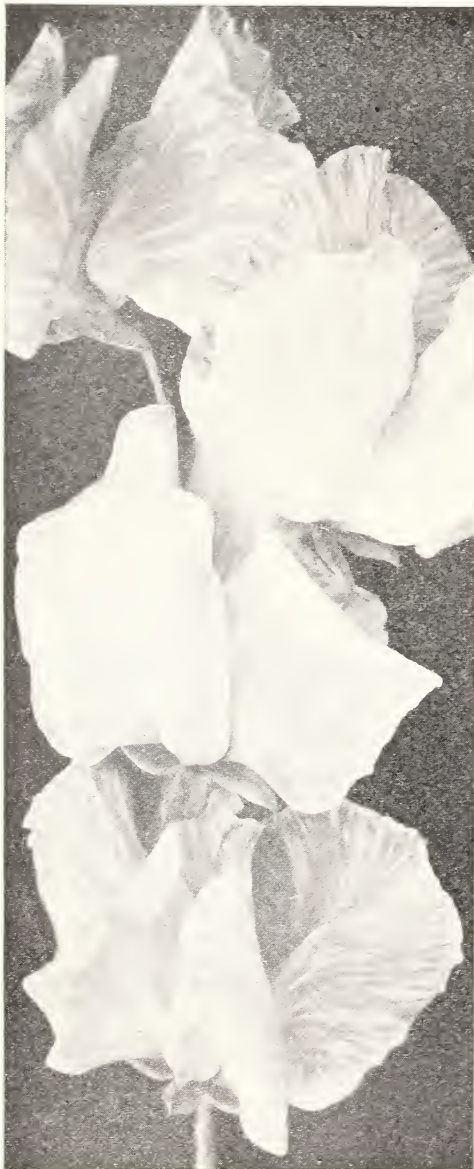
No. 1119. **MASCOTT'S WHITE**—Solid white, like a snowbank.

No. 1123. **TANGERINE IMPROVED**—A very rich glowing orange.

No. 1049. **WEDGWOOD**—Azure blue, the best light blue.



BUTTERFLY COLLECTION
of Giant Waved Spencer Sweet Peas.
One regular 10c packet each of the
above splendid varieties at the special
collection price of only **40c.**



Sweet Peas

Price, Any Named Variety
Pkt., 10c; Oz., 30c

No. 1024. **AMERICA**—Ivory, striped crimson, large.

No. 1165. **AUSTIN FREDERICK**—Giant waved lavender.

No. 1005. **ASTA OHN**—Rich lavender, suffused mauve.

No. 1114. **BLANCHE FERRY**—Rose pink, white wings.

No. 1166. **COMMANDER GODSALL**—A wonderful violet blue.

No. 1042. **DOBBIE'S CREAM**—An unusual deep primrose.

No. 1193. **DOBBIE'S BLUE PICOTEE**—White, edged violet blue.

No. 1195. **ELEGANCE**—Blush lilac, suffused delicate pink.

No. 1198. **ELFRIDA PEARSON**—Large, shell pink, waved.

No. 1072. **FIERY CROSS**—Orange cerise, very fiery.

No. 1118. **HAWLMARK PINK**—A wonderful rich, rosy pink.

No. 1196. **HAWLMARK CERISE**—A new creamy rose cerise.

No. 1045. **ILLUMINATOR**—Salmon orange, overlaid cerise.

No. 1197. **JEAN IRELAND**—(Picotee), fine cream, edged rose.

No. 1192. **KING MAUVE**—Large, waved mauve, good stems.

No. 1041. **KING WHITE**—Large, waved white, always good.

No. 1190. **MAGIC**—Rosy, a methyst, shaded blue, a novelty.

No. 1011. **MRS. ROUTZAHN**—Apricot or straw, suffused pink.

No. 1120. **MRS. TOM JONES**—Bright delphinium blue, new.

No. 1121. **PICTURE**—Flesh pink, suffused apricot, very good.

No. 1002. **PRIMROSE SPENCER**—Best clear primrose, nicely waved.

No. 1191. **RENOWN**—Rich rosy carmine, on long stems.

No. 1113. **ROYAL PURPLE**—The finest purple, very intense.

No. 1122. **ROYAL SCOT**—Orange scarlet, has lots of fire.

No. 1051. **SENATOR**—Very light heliotrope, striped claret.

No. 1189. **SUNSET**—Rich rose on amber ground, very showy.

No. 1124. **THE CARDINAL**—Intense poppy scarlet, large, waved.

No. 1125. **VALENTINE**—Blush pink, waved, one of the best.

No. 1046. **VERMILION BRILLIANT**—Fine scarlet, good stems.

No. 1188. **WARRIOR**—Deep bronzy maroon, almost black.

Price, Any Named Variety
Pkt., 10c; Oz., 30c

Jilly's

Mixed Spencer Sweet Peas.

A superb mixture of best giant waved varieties. This splendid mixture contains nearly all varieties of the Spencer type and is designed for those who wish all colors, shades and tints but do not care to keep them separate or to go to the expense of purchasing each of the many varieties.



No. 1007. Mixed Spencer SWEET PEAS.
Pkt., 10c; Oz., 25c; 1/4 lb., 75c;
Lb., \$2.25

Scarlet Runner Bean

Popular for both ornamental and culinary purposes. This bean has attractive pea-like flowers of a brilliant scarlet that are followed by an abundance of crops of edible beans. The plant is of easy culture. Plant the seeds at the base of the trellis upon which they are to grow the latter part of April or early May and thin the plants to stand 4 to 6 inches apart. They often grow 10 to 12 feet tall. A light, warm, loamy soil, lightly fertilized and situated in a sunny location is most suitable.

No. 2001. **SCARLET RUNNER BEAN**—Scarlet.

Pkt., 10c; 1/2 Lb., 25c; Lb., 45c

Shasta Daisy

This splendid hardy perennial grows two to two and one-half feet high and produces an abundance of showy flowers four inches in diameter with pure white petals and yellow centers on long, wiry stems. Blooms abundantly from early summer until frost. A great favorite for borders, masses and cut flowers. Sow the seed in seed bed or cold-frame in fall or early spring. Transplant to permanent bed about six inches apart.

No. 1004. **SHASTA DAISY**—White yellow center.

Pkt., 10c; 1/4 Oz., 50c

Sweet William

(*Dianthus Barbatus*)

Well known, attractive, free-flowering, hardy perennials, producing splendid effects in beds and borders. Sow the seed outdoors early in spring in a well-prepared seed bed, transplant or thin the plants to about six inches apart; or the seed may be sown in fall, and the plants wintered over in a cold-frame. Although they are perennials, flowers will be produced the first summer, and the best results will be had by growing new plants each year. Colors are white, the various shades of pink, rose, crimson, etc., many with penciled and colored centers.

No. 26. **SWEET WILLIAM**, Single—Mixed colors.

Pkt., 10c; 1/4 Oz., 25c

No. 27. **SWEET WILLIAM**, Double—Mixed colors.

Pkt., 10c; 1/4 Oz., 30c

SWEET ALYSSUM—See Alyssum.

SWEET SULTAN—See Centaurea.

Sunflower

Helianthus

The dwarf, double, many-flowered varieties are really useful and artistic when skillfully employed. The seed should be planted in the open ground from the middle of April to the end of May, and the plants thinned to stand two to four feet apart, according to whether dwarf or tall.

No. 128. **SUNFLOWER, Dwarf Double**—This is a very double variety, growing about four feet high.

Pkt., 10c; Oz., 35c

SUN PLANT—See Portulaca.

TAGETES—See Marigold.

Thunbergia

Black Eyed Susan

A very beautiful, rapid growing annual climbing vine with attractive green foliage, growing about four feet long and used extensively for window boxes, hanging baskets, and for covering low trellises and fences.

Sow seed outdoors in well pulverized rich soil after all danger from frost has passed, covering seed to a depth of about 3 times its size. Press soil down firmly and when plants are well established thin out or transplant to prevent crowding. If started indoors young plants should not be transplanted to the open until after the ground has become warm and the weather thoroughly settled.

No. 1153. **THUNBERGIA**—Large flowering, mixed colors.

Pkt., 10c; ¼ Oz., 50c

Violet

These little hardy perennials are unexcelled for beds, borders, and rock work. On account of its delightful fragrance, beautiful coloring and dainty appearance is unequalled for cutting. Grow about 4 inches high.

Seeds may be sown outdoors early in spring, so that plants will bloom during late summer and fall or started in early fall plants will produce a profusion of bloom the following spring and summer.

No. 319. **VIOLET, Large Single.**

Pkt., 10c; ⅛ Oz., 50c

No. 1106. **VIOLA, Cornuta**—Tufted Pansy, Violets, mixed colors.

Pkt., 10c; ⅛ Oz., 50c

WILD CUCUMBER—See Echinocystis.

Verbena

The Verbena is a low-growing, creeping, half-hardy perennial usually treated as an annual, and is useful in beds, borders, mounds, window boxes, and for bouquets and table decoration. The seed should be sown in March, in the hot bed or in the house, and the plants transplanted outdoors after all danger of frost is past, setting them ten to fifteen inches apart in well-drained garden soil and a sunny position. They are suitable flowers for ground covering and make good masses in the border. As cut flowers they are attractive when loosely arranged in low bowls and vases. It is well to pinch back the plants when young to make them branch. Keep the flowers cut or they stop blooming when seed formation starts.

No. 1154. **VERBENA, Special Giant**—Mixed colors. These are the latest introductions.

NOTE: See Back Cover Collection.

Pkt., 10c; ¼ Oz., 50c

No. 88. **VERBENA, Giant Hybrid**—A splendid mixture of large flowering varieties; all colors.

Pkt., 10c; ¼ Oz., 50c

Wallflower

Well-known, deliciously fragrant, half-hardy perennials, producing spikes of beautiful flowers early in spring. Plants are bushy, growing to a height of 1 to 3 feet, foliage is dark green and flowers are borne on tall, graceful spikes. The seed should be sown early in the fall, the plants wintered over in a cold-frame and set out when danger of hard frost is past in spring.

No. 98. **WALLFLOWER, Double**—Mixed colors.

Pkt., 10c; ¼ Oz., 40c

No. 99. **WALLFLOWER, Single**—Mixed colors.

Pkt., 10c; ¼ Oz., 25c

Wild Flower Garden

A combination of 15 to 20 different hardy annuals which will produce an abundance of blooms all summer. Desirable for out of the way corners or semi-wild spots. Sow the seed broadcast during March or April or May, after the ground has been put in good cultivation, and the effect will be most pleasing. Also effective for large window boxes.

There are few things more pleasing than a wild-flower garden hidden away in some secluded spot or among shrubbery.

No. 438. **WILD FLOWER GARDEN.**

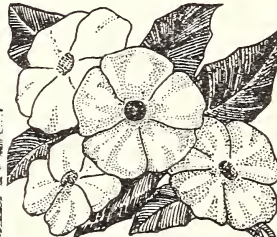
Pkt., 10c; Oz., 25c; Lb., \$2.00



SHASTA DAISY



SUNFLOWER



THUNBERGIA



VERBENA

Zinnia

Youth and Old Age

A half-hardy annual, growing about eighteen inches high, and producing a multitude of large, double flowers of a great variety of colors and shades, valuable for groups, beds, borders, or hedges, and for bouquets. The colors are soft but glowing and include rose, orange, crimson, scarlet, yellow, salmon and purple. The seed should be sown in the open ground in early spring and the plants thinned to two feet apart. They will be at their best in August, and will continue to bloom until late in the fall. Place the plants in well enriched soil and working some fertilizer deep down under the plants is well repaid. Desirable for bouquets as the stems are long and stiff and blooms keep well after being cut. They are most effective in masses.

No. 933. ZINNIA, Double Giant Mixed—A choice mixture, including the best and largest types, producing plants of handsome, compact form, and immense, perfectly formed, double flowers in brilliant mixed colors.

Pkt., 10c; ¼ Oz., 35c

No. 100. ZINNIA, Mixed—A splendid mixture of good varieties.

Pkt., 10c; ¼ Oz., 25c

No. 1164. ZINNIA, Cactus or Quilled—Mixed.

Pkt., 10c; ¼ Oz., 40c

No. 1159. ZINNIA, Dahlia Flowered—Golden.

Pkt., 25c; ⅛ Oz., 75c

No. 1160. ZINNIA, Dahlia Flowered—Pink.

Pkt., 25c; ⅛ Oz., 75c

No. 1161. ZINNIA, Dahlia Flowered—Crimson.

Pkt., 25c; ⅛ Oz., 75c

No. 1162. ZINNIA, Dahlia Flowered—Lavender.

Pkt., 25c; ⅛ Oz., 75c

No. 1163. ZINNIA, Dahlia Flowered—Mixed.

Pkt., 10c; ⅛ Oz., 50c



Zinnia

No. 1155. ZINNIA, Double Giant—Golden yellow.

Pkt., 10c; ¼ Oz., 50c

No. 1156. ZINNIA, Double Giant—Lavender.

Pkt., 10c; ¼ Oz., 50c

No. 1157. ZINNIA, Double Giant—Pink.

Pkt., 10c; ¼ Oz., 50c

No. 1158. ZINNIA, Double Giant—Crimson.

Pkt., 10c; ¼ Oz., 50c

No. 1186. ZINNIA, Double Giant—White.

Pkt., 10c; ¼ Oz., 50c

No. 1182. ZINNIA, Double Giant—Canary yellow.

Pkt., 10c; ¼ Oz., 50c

Wistaria

Chinese

The well-known hardy perennial vine of luxuriant and rapid growth, bearing, during the spring, immense panicles of fragrant blue flowers in great profusion, frequently blooming both in spring and fall. An extremely graceful climber. For trellis and arbor work no other vine can surpass it.

Seed may be sown outdoors early in spring in a rich, mellow loam or plants may be started indoors, or in a hot bed during winter. When plants are 1 foot high transplant to permanent, sunny location.

No. 1183. WISTARIA, Chinese—Blue.

Pkt., 10c; ¼ Oz., 50c



WALL FLOWER



XERANTHEMUM

JULY'S RAINBOW COLLECTION, Double Giant Zinnias—One regular 10c packet each of the above six varieties at the special collection price of only 40c.

Xeranthemum

Immortelle

An interesting everlasting with purple, lavender, pink and white flowers growing two feet tall and bearing its blooms in clusters. Plants remain in bloom from early summer until late in fall and are at all times very effective. When blooms are cut before being fully expanded and dried in the shade they will retain their color for years. Sow in the open late in March or early in April. Thin the plants to stand eight to ten inches apart.

No. 1140. XERANTHEMUM, Everlasting—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

POINTERS ON MAKING LAWNS

PREPARING THE SOIL

In general, grass seeds are small and the surface seedbed need only be one inch in depth, but since the grasses as they become established send out long lateral feeding roots, it is vitally necessary that the soil be thoroughly prepared to a depth of at least 8 inches. It is a good plan to let the ground lay several weeks after it has been shaped up and prepared in order that most of the weed seeds in the soil will germinate and be destroyed by surface cultivation.

Thorough drainage is necessary and with this accomplished a beautiful lawn can be developed on almost any soil with the use of good seed and fertilizer. The top inch of soil should be screened through a $\frac{1}{4}$ -inch mesh screen.

SEEDING

Sow at the rate of one pound per hundred square feet. It is better to use an excessive amount of seed and allow nature to eliminate the weak specimens rather than to depend on the plants to spread sufficiently to take possession of the entire area. Thickly seeded lawns give little opportunity for the development of weeds. Scattering the seed evenly, it is best to divide the seed to be used into two equal parts and seed one section of it lengthwise the tract and the second crosswise. This insures good, even seeding. Immediately after sowing the seed, roll or tamp it again to firm the soil around the seed in order that the seed may get sufficient moisture to germinate and grow. Do not rake after sowing, ground should be dust dry, if possible, before sowing, then thoroughly rolled or tamped then watered and possibly rolled again the following day.

WHAT TO SOW

A mixture of several varieties of grasses ordinarily makes the best lawn. All grasses have an off or rest period, at some time during the year at which time very little new growth appears. These rest periods vary with different grasses as to season and by seeding a mixture the lawn always looks thrifty and fresh.

The use of Crebent Lawn Mixture is strongly recommended. Only the fine leaved and long lived grasses are used in this mixture, which will produce a beautiful, velvety carpet like lawn that will last for years. Just enough white clover is used to make a quick showing and act as a nurse crop for the grasses while they are becoming established, or this mixture may be had without the white clover.

If a low priced seed is desired we suggest Nonpareil Lawn Grass, which will very quickly produce a green covering. It is a mixture of suitable, hardy grasses selected to produce a quick lawn that will stand lots of abuse and stay green the year around. Some of the grasses will eventually become coarse and bunchy, but for a serviceable mixture it is ideal.

PLANTING TIME

Lawns are started more easily and with less expense for labor in the early Fall while the soil is still warm and the approach of Fall rains saves watering, but a lawn may be started at any time during the year when there is sufficient warmth to germinate the seed by using a mulch of some sort such as Peat Moss, excelsior, or even small brush to provide a partial shade from the direct rays of the sun.

FERTILIZING

After the ground has been spaded and shaped up in the desired manner Morcrop Fertilizer should be scattered evenly over

the entire surface. The succeeding tillage before planting, will thoroughly mix it with the upper layer of soil where it will be immediately available for the young grass plants and will give them a quick start. When the fertilizer is worked into the soil before sowing use 50 lbs. Morcrop to each 1,000 square feet of ground, on established lawns use 25 pounds Morcrop to each 1,000 square feet of ground during cool rainy weather and 10 to 15 pounds of Morcrop to each 1,000 square feet during hot sunny weather.

Always fertilize twice each year, once between September 1st and January 1st for a winter application and again in early Summer, and a beautiful green, fine leaved lawn will result.

A lawn that is well fertilized does not require as much water and much less weeding. Do not use Lime, which destroys the best lawn grasses and ruins the texture of the soil. Always use a complete commercial fertilizer for best results and be sure to distribute evenly to avoid burning in spots. It is necessary to make top dressings carefully; spread Morcrop on evenly over the entire surface, avoid lumps; and always water thoroughly immediately after applying it.

MOWING

Commence mowing as soon as the grass is high enough. Repeated mowing thickens the stand and a well cut lawn retains the soft, velvety appearance so desired. Do not leave clippings on the lawn as they spoil the appearance and on a young lawn are likely to smother and kill the tender grass.

Moss in a lawn is a sure indication of lack of plant food (fertilizer), a well fertilized lawn will have no moss and very few weeds.

Yellow spots in a lawn that appear late in summer are usually caused by lack of plant food which has been removed by constant watering. This condition can be remedied within ten days by an application of Morcrop Fertilizer.

THE CARE OF ESTABLISHED LAWNS

It is a mistake to allow a lawn to go in an unkept condition at any time. In order to have a uniform green ward it should be kept in a luxuriant, vegetative condition and never allowed to produce seed. There is no operation connected with plant life which is so trying upon its vitality as the production of seed.

Frequent mowing is necessary, but in using the mower the clipping should not be done so close as to deprive the plants sufficient leaf area to carry on their normal functions. Repeated mowing improves the stand. If the soil is very rich, and the growth luxuriant, it may be necessary to catch some of the clippings in a carrier and remove them, but on many soils the clippings will prove beneficial if left, providing the cutting is frequent enough.

With lawns we aim to have the root systems develop near the surface to aid materially in making a dense, resilient mat which is so desirable. These roots must receive their supply of moisture and food from a limited depth of soil, which is one of the principal reasons why it is desirable to water and top-dress the lawn frequently and liberally during the summer months.

Occasional weeds, like plantain, dandelion, dock, etc., may appear from seeds brought by birds, wind, etc., which, if taken when they first appear, can be easily removed with a trowel or knife. Don't let them get a foothold and produce seed.

LAWN GRASS MIXTURES

LILLY'S Crebent

Evergreen Mixture

The successful establishment of a good turf whether for lawn, golf course, recreation park, etc., depends upon careful preparation and the proper fertilization of the soil and the selection and timely planting of appropriate grasses in properly balanced mixtures.

In Lilly's Crebent Evergreen Lawn Grass Mixture we are able to offer you a combination of grasses that have proven to be best adapted for fine lawn making in the Northwest. The mixture is composed of hardy grasses selected because of their adaptability and desirability for fine lawn purposes. Several of the most desirable grasses in the mixture are imported from foreign countries which makes it possible to produce just what we want in a combination of fine grasses and still remain within a reasonable price range. No longer does one have to envy the rich in the matter of lawns, as Crebent Lawn Grass at a nominal price, will quickly produce a fine lawn under favorable conditions.

Creeping Bent and Chewings New Zealand Fescue predominate in this mixture and a small amount of White Dutch Clover is added to act as a nurse crop or ground covering until the lawn becomes established. No coarse leaved or bunch grasses are used in this mixture, only the fine leaved and long lived grasses have been selected.

Crebent Mixture will quickly make a beautiful velvety carpet-like lawn that will be a joy for years. In the shade, in the sun and on the terrace Crebent will give you complete satisfaction. Chewings New Zealand Fescue and Creeping Bent, because of their spreading habits of growth, will quickly heal minor injuries to the turf.

To those who wish a permanent, fine lawn we recommend this mixture.

1-lb. pkg., **75c**;

5-lb. pkg., **\$3.25**;

25-lb. Sack,
\$17.25.

Imported Mixture

Plant 5 lbs. per 1,000 sq. ft.

An extra fancy mixture of fine leaved grasses only. Chewings New Zealand Fescue, Creeping Bent, Kentucky Blue Grass, Red Top and Crested Dogtail are selected to make up the greater portion of this excellent lawn mixture. Contains no clover and should be sown thickly, as the finer leaved grasses start slowly. Sow at least 5 pounds per 1,000 square feet of surface. More seed makes a quicker and more satisfactory lawn, as much as one pound for each hundred square feet is often used. We recommend this mixture to those desiring a fine lawn without clover.

1-lb. Cartons, **75c**; 4-lb. Cartons, **\$2.60**;
25-lb. Sacks, **\$17.25**

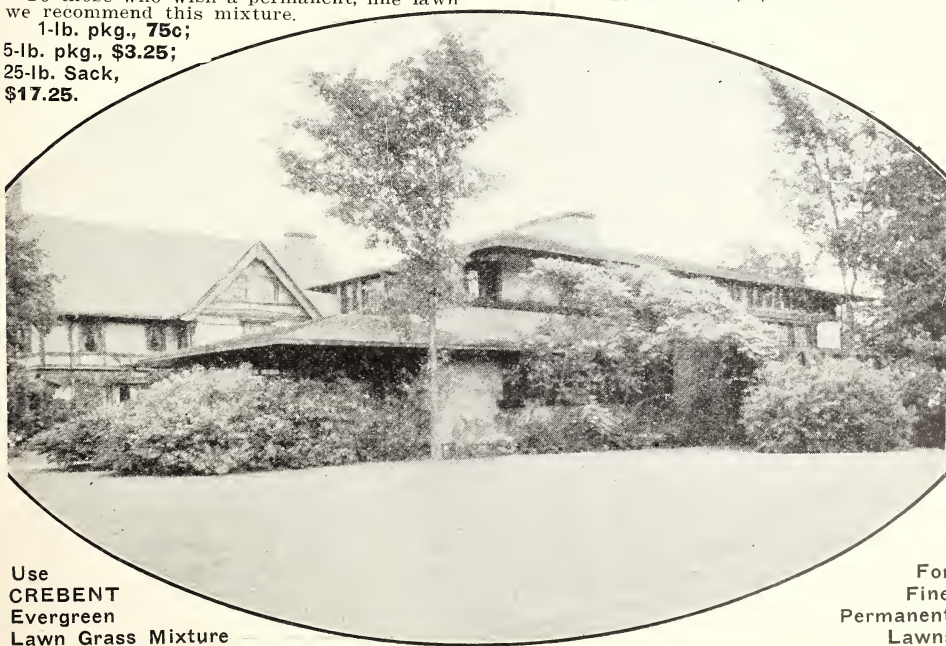
Nonpareil Mixture

Plant 5 lbs. per 1,000 sq. ft.

A mixture of suitable, hardy grasses selected to produce a quick lawn that will stand lots of abuse and stay green the year round. Some of the grasses will eventually become coarse and bunchy, unless it is well fertilized with Morcrop-L and cared for, but for a serviceable backyard mixture it is ideal. It is also low in price.

1-lb. Cartons, **50c**; 5-lb. Cartons, **\$2.25**;

25-lb. Sacks, **\$11.25.**



Use
CREBENT
Evergreen
Lawn Grass Mixture

For
Fine
Permanent
Lawns

ALFALFA

15-18 lbs. plants an acre. Under dry-farming conditions (non-irrigated) 8-12 lbs. is sufficient.

(Medicago sativa)

It is best to precede alfalfa for a year or two with some cultivated crop, such as corn or potatoes, to free the land from weeds. The ideal seed bed is a well-settled subsurface with a fine surface that is loose to a depth of two inches.

The best soils on the farm should be selected for the alfalfa field. It is practically useless to attempt to grow the crop on non-productive lands to improve them.

Care should be taken, particularly west of the Cascades, that alfalfa is not planted on bottom land where the water level is within 15 feet of the surface. Alfalfa roots submerged in water will inevitably die.

Alfalfa should be sown early enough to

permit the plants to become well established before the winter sets in.

Except under very favorable conditions alfalfa should be sown with a nurse crop. Beardless barley, rye or wheat are the best nurse crops, but should be seeded only one-half as thick as for a grain crop.

On soil where alfalfa has not been sown for some years it is always advisable to inoculate the seed with Farmogerm before planting—this costs but little and is good insurance of a crop. All seed planted west of the Cascade mountains should be inoculated.

Alfalfa should be cut for hay when the plants are well in bloom.

Varieties: The Common Alfalfa is best adapted to Northwest conditions except in a few districts where the winters are severe. In such sections Grimm is preferred to the Common. Hairy Peruvian and Cosack have both been tried in this section but failed to show any special merit. Never buy seed that is less than 99 per cent pure.

PRICES

on the seeds of Alfalfa, Clovers, Grasses, Grains, etc., change with market values, which prevents our pricing them in this catalog.

Let us quote you the lowest market price, when you are ready to buy.

LILLY'S

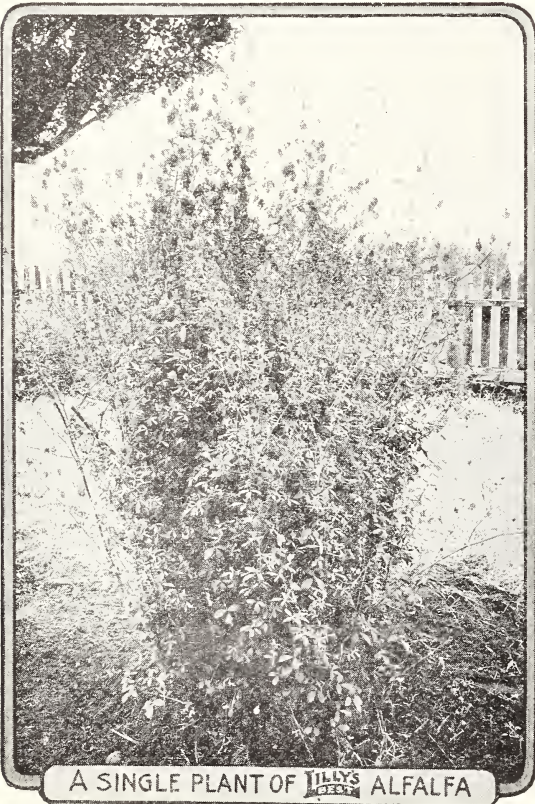
Best ALFALFA—This is the only grade of common alfalfa that we offer. Because alfalfa fields are left for a long time when once established, there seems to be no logical reason for using any other seed but the best. Lilly's Best Grade of Alfalfa is always better than 99 per cent pure.

GRIMM ALFALFA—Of great value where the winters are severe and where common alfalfa freezes out. This variety has attracted considerable attention of recent years because of its peculiar branching root system and frost resistance, which makes it of great value in the sections where severe winters prevail. Its yielding power of forage or hay is no greater than that of common alfalfa, although the price of the seed is generally much higher. We handle only the best strain.

TURKESTAN or DRY LAND ALFALFA is very hardy and is adapted to very dry and unirrigated lands. We recommend this variety only in the dry belt where no irrigation water is obtainable.

Prices quoted on application.

All Alfalfa Seed sown west of the Cascade Mountains requires inoculation with nitrogen-gathering bacteria in order that the crop may thrive. We recommend that you use **FARMOGERM**, the original and still the best culture on the market.



A SINGLE PLANT OF **LILLY'S** ALFALFA

CLOVERS

Alsike Clover

(*Trifolium hybridum*)

8-10 lbs. plants an acre.

Alsike Clover is most at home in northern latitudes or at high altitudes. It thrives best in a cool, moist climate. Mixed with red clover on uplands, alsike clover insures a stand on spots where red clover does not catch. Alsike clover is used mostly in mixtures with timothy or other grasses. In such mixtures it improves the hay and increases the yield. The grasses serve to support the clover and make it easier to cut and cure.

Alsike Clover will endure overflow that would kill most crops. It has been known to grow a year in water-soaked and water-covered soil and make a heavy growth. It is a good pasture plant, often remaining in a permanent pasture for many years. It is a good clover to seed in swales or on wet, natural meadows. It volunteers readily and will spread in such places.

Do not take it from the above statement that Alsike will not do well on uplands. It is particularly recommended for such by the Western Washington Experiment Station and makes a superior hay when mixed with Rye Grasses. Alsike matures at the same time as the Rye Grass, whereas Red Clover matures earlier and is not ready to cut when the Rye Grass is just right for hay.

We can supply three grades of seed.

ILLY'S Best ALSIKE—Better than 99 per cent pure.

Evergreen ALSIKE—At least 98 per cent pure.

Skookum ALSIKE—At least 92 per cent pure.

Prices quoted on application.

Ladino Clover

6-8 lbs. plants an acre.

A tall growing kind of White Clover which seems to be destined to become important as a pasture plant. In Idaho it has yielded twice as much pasturage as blue grass and grows sufficiently tall to cut for hay. It should be given a trial on every dairy farm.

Get our prices before you buy.

JUST ONE REASON WHY GOOD SEED IS IMPORTANT

The seeds of many weeds commonly found in clover seed are very small and escape notice. A pound of clover dodder has 1,641,000 seeds; common plantain 1,814,360; Lamb's quarter 604,736 seeds; Russian thistle 266,817 seeds; wild mustard 215,995 seeds; wild oats 25,493 seeds. Red Clover seed contains 313,900 seeds per pound. The Pure Seed Law requires only 92 per cent purity.

This allows more than a pound of weed to each acre. Russian thistle seed is very nearly the same size as Red Clover. Suppose this pound is Russian Thistle, as is often the case. This means you sow 266,817 Russian thistle seeds per acre. An acre contains 43,560 square feet so there would be six weeds to every square foot and a single thistle plant will ripen 100,000 to 200,000 seeds.

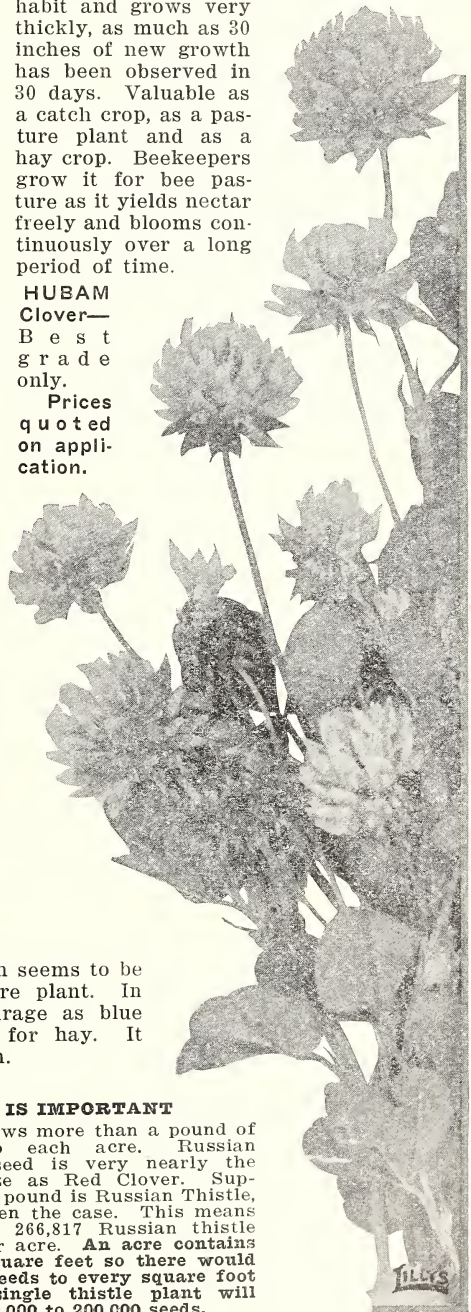
Hubam Clover

15-20 lbs. plants an acre.

An annual strain of the White Blossom variety. It is of large, erect, branching habit and grows very thickly, as much as 30 inches of new growth has been observed in 30 days. Valuable as a catch crop, as a pasture plant and as a hay crop. Beekeepers grow it for bee pasture as it yields nectar freely and blooms continuously over a long period of time.

**HUBAM
Clover—
Best
grade
only.**

**Prices
quoted
on appli-
cation.**



Red Clover

(*Trifolium medium*)

8-12 lbs. plants an acre.

Generally speaking, Red Clover reaches its highest development in the western portion of Oregon and Washington, where under favorable conditions it may be cut three times during the year. The first crop should be cut for hay or ensilage early in June, the second for hay in August and the third for ensilage of green feeding late in the fall.

When Red Clover is to be grown on land that has been in cereals or other non-leguminous crops for several years, the seed should be inoculated. Farmogerm is the best for this purpose and its use insures a better stand.

Red Clover can be sown either in the spring or fall and generally does best with a grain crop that is not too thick, although it may be sown alone in the late summer or early autumn. This method is seldom used but is probably one of the most satisfactory ways of seeding west of the Cascade Mountains.

The soil should be well prepared and the seed must not be covered too deeply, although it must be in firm contact with the soil. Therefore, light loams or loose soils should be packed or rolled so as to keep the moisture in them available to the young clover plants at all times.

Red Clover is well suited to be sown with timothy for hay crop and should be in all hay and pasture mixtures. It is often sown alone especially in sections where the conditions are favorable to seed production.

We can supply three grades of seed.

JILLY'S Best RED CLOVER—99% pure.

Evergreen RED CLOVER—98% pure.

Skookum RED CLOVER—92% pure.

Prices quoted on application.

Our third brand is **SKOOKUM**.

This is lower both in purity and germination than the Evergreen Brand, but is still high enough in quality to comply with all the State Pure Seed Laws which require 98 per cent purity.



Brands and Quality

There is a great variation in the quality of different lots of Alfalfa and Clover Seed. To those people who are unaccustomed to handling or judging seed this difference is seldom apparent.

In order to establish a standard of quality the leaders in the seed industry have resorted to the use of Brands which could be easily recognized by the buyer.

Our leading brand is **JILLY'S BEST** generally spoken of as L. B. Only the best seed obtainable is so branded. It is generally better than and always at least 99 per cent pure and of the highest germination. We always recommend this brand.

Our next brand is **EVERGREEN**. This brand is equal to and, in many cases, exceeds the purity and germination of other "best" brands of seed. Usually tests 98 per cent pure.



Sweet Clover--White

(*Melilotus alba*)

15-20 lbs. per acre for Hay.
25-30 lbs. per acre for Pasture.

Sweet Clover may be utilized for feeding purposes, as pasturage, hay or ensilage. It seldom causes bloat.

Sweet Clover should never be permitted to show flower buds before it is cut for hay. It is very important that the first crop of the second season be cut so high that a new growth will develop. When the plants have made a growth of 36 to 40 inches it may be necessary to leave the stubble 10 to 12 inches high.

Sweet Clover has proved to be a profitable soil-improving crop. The large, deep roots add much humus to the soil and improve the aeration and drainage. As a rule, the yield of crops following Sweet Clover is increased materially.

Being a biennial, this crop lends itself readily to short rotations. We offer only scarified seed which insures uniform germination.

WHITE BLOSSOM SWEET CLOVER—Scarified. We have one grade only.

Sweet Clover--Yellow

(*Melilotus officinalis*)

15-20 lbs. plants an acre for Hay.
25-30 lbs. should be used for Pasture.

Yellow Blossom Sweet Clover culture is the same as White Blossom and it is especially recommended for use as pasture either alone, or mixed with grasses on dry land or on land that is so alkaline that other crops will not catch.

This variety of perennial Yellow Blossom Sweet Clover does not grow as tall as the biennial white blossom sort but it branches closer to the ground and comes earlier in the season. These features are decided advantages in its favor and it will undoubtedly rapidly become the most popular variety of sweet clover both for pasture and hay purposes in the alkaline section of the Northwest. We offer only scarified seed which insures uniform germination.

YELLOW BLOSSOM SWEET CLOVER—Perennial. One grade only.

White Clover

(*Trifolium repens*)

6-8 lbs. per acre for Pasture.
1 lb. to 500 sq. ft. for Lawn.

This is also called White Dutch Clover. It is a perennial plant, making growth of from four to ten inches. The stems are creeping and root at the joints.

It is an excellent plant for lawns as it will grow under almost any conditions, is easy to start, and will make a nice lawn within six weeks from the time of planting. It will grow on almost any kind of soils. In sowing lawns it is always advisable to use grass seeds with the white clover as after two years the clover will become ragged if sown alone. White Clover is also excellent for pastures. It produces a forage that is well liked by all stock, is sweet, very nutritious and makes lots of milk. For pastures it should be sown at the rate of six to eight pounds to the acre in addition to other grasses. It makes a good mixture with Italian Rye Grass, Orchard Grass and Redtop. In sowing large lawns or parks use from 25 to 100 pounds per acre. The more seed the better the turf you will have.

Lilly's Best White Clover is grown on land free from noxious weeds, is thoroughly re-cleaned, and is as near perfect as it can be produced.

 **Best WHITE CLOVER**—98% pure. The best you can buy.

Evergreen WHITE CLOVER—Not as good as L. B. but good seed.

Skookum WHITE CLOVER—Used principally for pasture purposes.

Prices quoted on application.

PRICES

on the seeds of Alfalfa, Clovers, Grasses, Grains, etc., change with market values, which prevents our pricing them in this catalog.

Let us quote you the lowest market price, when you are ready to buy.

Inoculation

The "Inoculation of legumes is desirable. (1) If the soil has not previously borne leguminous crops. (2) If legumes previously grown on the same land were devoid of nodules. (3) If the legumes to be sown belong to a species not closely related to one previously grown on the same soil. (4) If the soil produces a weak growth of legumes, even though their roots show some nodules.

"It is significant of the relative value of pure culture inoculation that a high percentage of beneficial results is being obtained, not only where legumes new to the region are being tried, but where the ordinary legumes used in rotation have been

inoculated, a phenomenon which is undoubtedly due to the increased virility of the nodule-forming bacteria resulting from the proper development of the pure cultures in the laboratory. It is also true that the crops following the inoculated legumes have in many cases shown gains not evident in the legume crop. The practice of inoculating is therefore justified where legumes are naturally inoculated but do not seem to reach their full vigor nor to give the best results as green manure."

The above is copied from "Farmer's Bulletin 315", U. S. Department of Agriculture.

Field Peas

A Valuable Grain, Hay, Ensilage and Fertilizing Crop for the Northwest. Takes the Place of Corn for Hog Raising

120-180 lbs. per acre.

A valuable grain, hay, silage and green manure crop for the Northwest. The "corn" of the north Pacific coast. They should be sown very early in the spring as they like cool growing weather. Well drained loam soil is best.

Field peas (*Pisum arvense*) are well adapted to the conditions of Western Oregon and Western Washington. They do well on a large variety of soils, but are especially adapted to clay soils and alluvial bottoms. They are grown for grain, hay, ensilage and soiling. Peas are nutritious, and the hay and ensilage are eaten with relish by most kinds of stock. When grown for hay about 2 bushels of peas and 2 bushels of oats per acre are sown together as early in the spring as the condition of the ground will permit. When sown at the same time the oats often choke out the peas. This may be largely avoided by sowing the peas first, preferably with a drill since the seed is difficult to cover and when they have sprouts on them about 2 inches long, drill in the oats. This will give the peas the start and they will hold their own much better. If sown broadcast they should be well covered with a disk harrow. Peas should be cut for hay when the seeds in the first pods are just ready for table use. Sown in the early spring they mature for hay from the 1st to the 15th of July. The yield is from 1½ to 4 tons per acre. When harvested for seed the yield is usually from 25 to 30 bushels per acre. Peas are

often sown alone and harvested when mature by swine turned into the field.

Like clover, alfalfa and vetch, peas are legumes and valuable as a fertilizer. When peas are grown on land for the first time, the seed should be inoculated with Farmogerm to insure presence of nitrogen gathering bacteria.

We Can Supply the Following Varieties:

JILLY'S Yellow Canadian — The most generally grown variety of peas, both for stock, feed and human consumption. Seed is small, smooth and round and the yield large.

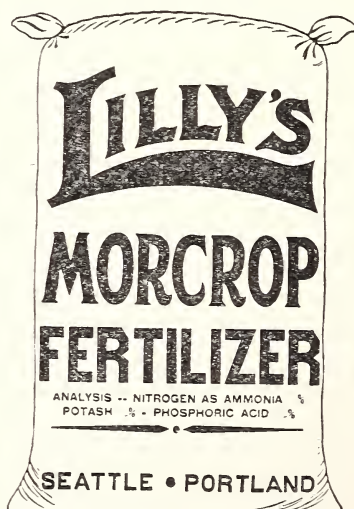
Blue or Green Field PEAS—A selected strain of blue or green peas, sometimes called Bluebell. Seed is larger than the Yellow Canadian, but similar in all other respects except color.

JILLY'S Marrowfat PEAS—A special strain of medium sized Marrowfats adapted to the Northwest. They are larger than the varieties listed above and are whitish-yellow in color. A splendid variety for table use, they are very rich and nutritious.

WHIP-POOR-WILL COW PEAS—Grown in a limited way in the warmer sections of eastern Oregon and Washington as forage and cover crops.

Prices on Application

It Pays to Use



VETCHES

30-40 lbs. of Hairy Vetch per acre. Other varieties 90-120 lbs. per acre.

Less if sown with grain.

The stems of vetch are not strong, and heavy crops are inclined to flatten out on the ground. When in this fallen condition it soon begins to mold and is very difficult to harvest. To furnish support for it and keep it up off the ground a bushel of oats, wheat, or rye, and a bushel of vetch per acre are usually sown together. It is a common practice with vetch growers to sow winter oats and vetch broadcast in the early fall on land that has raised a spring crop to cover the seed with a disk harrow. If the land is loose and easily worked, this method gives good results, but like most other crops vetch gives much better yields if sown on a well prepared seed bed. If the ground is packed, or if the seeding is done in the spring, the land is usually plowed and a good seed bed prepared.

Sown with rye the last of August or early in September, Gray, Hungarian and purple Vetch should be ready for soiling, i. e., feeding green, from April 15 to May 1; sown with winter oats or wheat October 1st, it should be ready about May 1; sown with winter oats or wheat in the late fall it should be ready about June 1; sown with oats in February, it should be ready about June 15th. It is sown also in the early spring, but fall seeding usually gives the largest yield.

When cut in the early spring for soiling a second crop may be cut or pastured, or the land may be plowed and planted to some other crop.

When seeds are just appearing in the first pods is usually considered the best time to cut vetch for hay. Some cut it earlier than this, while others allow the first seeds to become pretty well mature. If the crop is not too heavy it may be handled in the ordinary way, but it should be put into shocks before the leaves are dry enough to be broken off during the handling.

GRAY VETCH—Is also known as Oregon or Common Vetch. Adapted to either fall or spring planting and well adapted to all sections of the Northwest, especially the Pacific Slope. More Gray Vetch is grown than all other varieties put together.

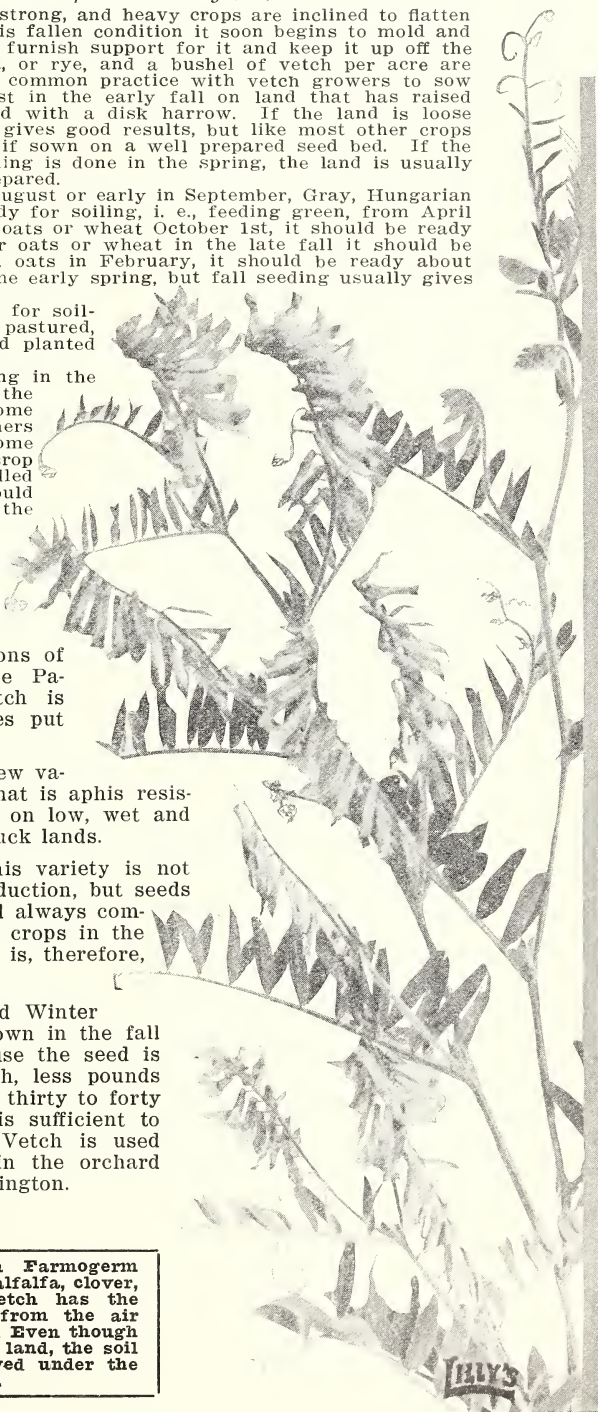
HUNGARIAN VETCH—A new variety developed at O. A. C., that is aphid resistant and adaptable to culture on low, wet and sour soils as well as heavy muck lands.

PURPLE VETCH—This variety is not so well adapted to forage production, but seeds heavy on uplands and the seed always commands a good price for cover crops in the citrus section of the south. It is, therefore, grown mostly for seed.

HAIRY VETCH—Also called Winter Vetch, is a biennial and is sown in the fall like any winter grain. Because the seed is much smaller than gray vetch, less pounds of seed are required per acre, thirty to forty pounds per acre with grain is sufficient to insure a good crop. Hairy Vetch is used extensively for cover crops in the orchard districts of Oregon and Washington.

Prices on Application

Inoculate Vetch Seeds with Farmogerm Culture before planting. Like alfalfa, clover, peas and other legumes, vetch has the power of drawing nitrogen from the air and distributing it in the soil. Even though the crop is removed from the land, the soil will be improved; when plowed under the benefit will be much greater.



Grass Seeds

The price of grass seed is not the most important factor that should influence its purchase. Nothing is more important to the farmer than that the grass seed he sows be pure and clean. The seed should also be plump, heavy, and well ripened, so as to insure a good stand. First-class, thoroughly re-cleaned seed, even though considerably more costly in the beginning, is really much cheaper in the end than the light, chaffy grades generally sold at much lower prices, even if the latter is free from weed seeds, which generally is not the case.

Brome Grass

(*Bromus inermis*)

15-20 lbs. per acre for Pasture in the dry land districts.

A hardy, smooth, erect, perennial usually two to three feet tall, producing strong creeping rootstocks. Primarily a dry land grass; it does best under dry farming conditions. Seeding can be done during fall or spring.

In the dry summers east of the Cascade Mountains it furnishes more green feed than any other of the true grasses. It is noted for its ability to withstand droughts and still it does well on moist soils. It is used extensively as a pasture grass in those sections and is exceeded in the quality of its herbage only by Kentucky bluegrass.

Orchard Grass

(*Dactylis glomerata*)

20-30 lbs. per acre for either Hay or Pasture.

Orchard grass, also known as Cocksfoot, is one of the earliest grasses to start up in the spring, remains green during long, hot summers and late into the fall; it furnishes abundant feed, and it is fairly well liked by stock; it grows in tussocks, and therefore, does not make an even sod, but its roots penetrate to a considerable depth causing it to withstand drought better than most other grasses on light and dry soils. Perhaps the most serious fault orchard grass possesses is its tendency to become woody soon after the blooming period is over. One of its most important advantages is that it ripens exactly with red clover, and is thus eminently adapted to sowing with that important leguminous plant. It is a week to ten days earlier than timothy and is generally conceded to possess longer life both in meadows and pastures. Its ability to grow in the shade of trees is likely responsible for its name. A possible objection to orchard grass for hay in the Puget Sound region is its early maturity, being ready to cut before dry weather has set in.

Crested Dogtail

(*Cynosurus cristatus*)

20-25 lbs. per acre for Pasture. 4-5 lbs. per 1,000 sq. ft. for Lawn. Best when used in mixtures.

It is adapted primarily to cool, moist regions like Western Washington and Oregon where it seems to thrive principally in the two extremes, hot sun and dense shade. Makes a fair lawn grass under those conditions and gives promise of becoming an important pasture grass on poor, sandy soils where no other grass will thrive. It is very nutritious and yields quite well.

Red Top

(*Agrostis vulgaris*)

12-15 lbs. per acre for Hay or Pasture. 4-8 lbs. per 1,000 sq. ft. for Lawns.

On land that is too wet for timothy, red top or herbs grass, as it is sometimes called, is decidedly the best substitute for that grass. It will even thrive on land too wet for cultivation. In the West there are many valleys in which there are extensive areas of low, level land, often too wet to plow on which red top is easily started. These meadows are the reliance of the rancher for winter feed and redtop is justly accorded a high place in the favor of the stockman. Red top is preferred for sowing with timothy, because it is not so early as orchard grass and makes a more even sod. Red top is the most variable of all the cultivated grasses. It is the best for wet land and when sown on upland is strongly drought resistant and is often used for holding banks to prevent erosion. The best form has large, erect stems, with broad, coarse leaves. This is the one generally grown for hay and pasture and the seed we offer is of this type. It makes a good sod, and bears cropping and trampling well. On account of its small seed, Red Top should have a fine, mellow seed bed and care should be taken not to cover the seed too deeply.

We can supply both hulled and unhulled seed.

FANCY HULLED SEED—92% pure.

UNHULLED SEED—Of good quality. 50% more seed is required when unhulled seed is used.

Prices Change with Market Values.
Get Our Prices Before You Buy.

TIMOTHY

(*Phleum pratense*)

8-12 lbs. plants an acre for Hay. For Pasture use that proportion in mixture with other pasture grasses.

One of the most universally known and cultivated grasses, growing 25 to 40 inches tall and found on nearly all sorts of soil. It is especially adapted to cool, moist soils and because the seed is usually cheap, of high germination and purity it is a general favorite with farmers. Unlike many other grasses, a few days' delay in the time of cutting makes but little difference in the quality of the hay—a very important point in a region or season where rains are frequent during the haying season. For cattle it should be cut just after it is through blooming, for horses ten to twelve days later. It does not stand grazing as well as other grasses and in some sections the best authorities advise against pasturing at all.

The importance of timothy in America is due to its rather remarkable combination of qualities, as well as its splendid adaption to the same area as red clover. Its advantages may thus be summarized:

1. It produces good yields.
2. A stand is usually secured easily.
3. The cost of seeding is less per acre than that of any other grass.
4. It seldom lodges.
5. It is easily cut and cured.
6. Its harvest period is longer than that of most grasses.
7. It is the favorite hay for horses and is in good demand.

We can supply three grades of seed.

JULY'S Best TIMOTHY—Better than 99% pure. Sow this grade for hay.

Evergreen TIMOTHY—At least 98% pure.

Skookum TIMOTHY—Suitable for pasture purposes only.

Tall Meadow Oat-Grass

(*Arrhenatherum avenaceum*)

20-30 lbs. plants an acre either for Hay or Pasture.

Tall meadow oat-grass matures exactly with orchard-grass and red clover and is, therefore, adapted to sowing with these crops. It has a slightly bitter taste but stock soon become accustomed to its peculiar flavor and it is as closely grazed in the pasture as any of the other grasses.

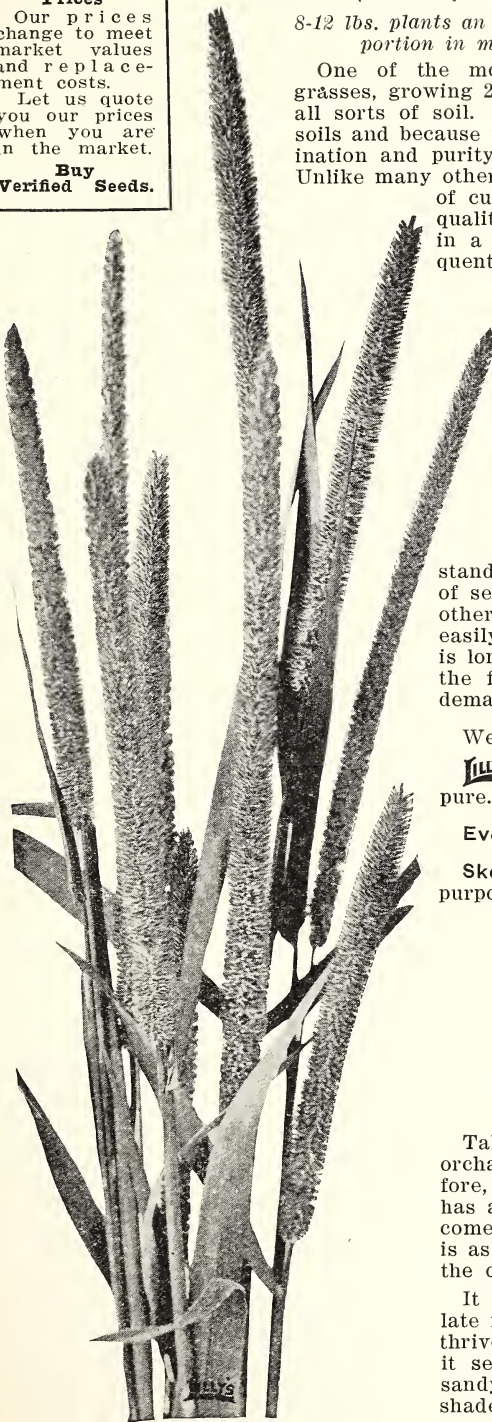
It stands pasturing well, remains green late in fall, does not become sod bound, and thrives on drier soils than timothy, in fact, it seems to be especially adapted to light, sandy or gravelly land. It does not like shade. Height from 30 to 60 inches.

Prices

Our prices change to meet market values and replacement costs.

Let us quote you our prices when you are in the market.

**Buy
Verified Seeds.**



Sudan Grass

(*Andropogon sorghum sudanensis*)

8-10 lbs. plants an acre.

Sudan grass is an early maturing annual sorghum plant. It is not particular about soil, but requires warm weather and must not be planted in the Northwest until the weather is well settled. Under favorable conditions only 90 to 100 days are required to mature a hay crop. Thick seeding is advisable, otherwise the crop grows too rank and coarse as the plants stool heavily and grow ten feet high if given sufficient room. Important as a fodder plant east of the mountains, where it seems to thrive on lands that are quite alkaline. It also endures excessive moisture and withstands extreme drought, but on the coast it seldom proves to be a valuable crop.

Velvet Grass

(*Holcus lanatus*)

20-30 lbs. plants an acre.

Also erroneously called Mesquite and Fog Grass. A good meadow grass in dry, sandy soil, of little value where other grasses thrive. It is a perennial about two feet tall and is soft and velvety.

The hay is remarkable for its lightness, a ton of it, being much more bulky than a like weight of other kinds of hay. The whole plant is covered by a growth of wool-like hairs.

Why Mixtures?

Whether for hay or pasture, there are many advantages to be obtained by sowing a mixture. Each grass lives, to a great extent, on different constituents. The season that would completely check the growth of one variety of grass will act as an encouragement to some other variety, so that the complete failure of a mixture is practically impossible.

Hay Mixture

Plant 20-30 lbs. an acre.

A splendid mixture, producing hay of fine quality and maturing evenly. Timothy, Red Clover, Orchard Grass, Rye Grass, Red Top, Meadow Fescue, etc., predominate in this mixture.

Per lb., 25c; 50 lbs., \$10.50;
100 lbs., \$20.00

No. 1 Pasture Mixture

Plant 20-30 lbs. an acre.

Especially prepared for wet bottom lands. Contains mostly such desirable seeds as Timothy, Alsike Clover, Rye Grass, Red Top and Meadow Fescue.

Per lb., 25c; 50 lbs., \$10.50;
100 lbs., \$20.00

No. 2 Pasture Mixture

Plant 20-30 lbs. an acre.

For benches and uplands, especially useful for sowing on logged-off land. Contains lots of Red Clover, Meadow Fescue, Timothy and Rye Grass, together with Red Top, etc.

Per lb., 25c; 50 lbs., \$10.50;
100 lbs., \$20.00

These Pasture Mixtures contain the correct early, medium and late grasses to supply pasture continuously during a long season; also bunch, deep rooting, and creeping grasses to form a tough and lasting turf. The Hay Mixture is composed of tall-growing grasses which will mature about the same time, and will produce the maximum amount of hay of the best quality.



BLUE GRASSES

Kentucky Blue Grass

(*Poa pratensis*)

4-5 lbs. per 1,000 sq. ft. for Lawns.

20-25 lbs. per acre for Pastures.

Its palatability to all classes of stock, the evenness of the sod it forms, the beautiful color of its verdure, and its increasing productiveness with age, if properly handled, all conspire to make bluegrass the king of pasture grasses. Were it not for its habit of remaining dormant during the dry, warm months of summer, the length of time required to secure a good stand of it, and its comparative low yield of forage, bluegrass would indeed leave nothing to be desired as a pasture grass on soils to which it is adapted. These objections to bluegrass are all real and the very general dependence on bluegrass for pastures in the past led many American farmers to the conclusion that they could not afford to keep their good lands in pasture. One of America's best authorities on the subject says it takes three years under the best conditions to establish a stand of bluegrass and that ten to twenty years are required to get a first class bluegrass pasture such as Kentucky stockmen boast about. In the Northwest it is a desirable ingredient in pasture mixtures, producing much succulent feed both spring and fall.

Canada Blue Grass

(*Poa compressa*)

20-25 lbs. per acre for Pastures.

Canada Blue Grass is a hardy perennial grass of value for pasture purposes on the sand soil, in the northern tier of States and Canada, producing an abundance of creeping root stocks by which it forms a close turf.

BENT GRASSES

Puget Sound Bent

(*Agrostis maritima*)

3-5 lbs. per 1,000 sq. ft. for Lawns and Golf Greens. 8-12 lbs. per acre for Pasture.

The true botanical name of this valuable grass is *Agrostis Maritima* and its natural habitat is the lowlands adjacent to the Puget Sound and North Pacific Coast. It is a close relative to True Creeping Bent, *Agrostis stolonifera*, which it resembles in many ways. Though it naturally prefers a moist soil it is found likewise on dry upland or sandy soils and stands drought very well indeed. Authorities assume that its natural preference for lowlands is due to its liking for lime-free or acid soils and not for excessive moisture, since it thrives noticeably during the dry fall months. On the other hand it will stand uninjured on land covered with water for several months. It is well suited for grazing purposes, to say nothing of its special qualities as a lawn and golf greens grass where it excels all other grasses. Once established it spreads rapidly by underground stems or stolons and forms a dense and permanent turf which improves with age. The plants are practically 100 per cent creeping and frequently vegetable propagation is practiced by taking up these creep-root stalks cutting them in 2-inch pieces and using them instead of seed for starting new lawns or greens.

Prices Change with Market Values.
Get Our Prices Before You Buy.
Buy Verified Seeds

It rarely attains a height of more than 24 inches, usually growing from six to eight inches high. It is dark blue in color and resembles Kentucky Blue Grass, to which it is related.

Its value is almost entirely as a pasture grass, since it does not grow to a sufficient height to give a profitable yield of hay. The hay which it does produce, however, is of excellent quality.

Poa Trivialis

15-20 lbs. per acre for Hay.

Commonly called Rough Stalked Meadow Grass, it is very much like Kentucky Blue Grass to which it is closely related. It is much easier to start than Kentucky Blue and grows and spreads much more rapidly. Its greatest value is as a hay plant and reaches its highest value for hay when in full bloom.

Poa Bulbosa

(Bulbous Blue Grass)

A new grass. It possesses characteristics which are rarely found among grasses. This plant never produces flowers or seeds. In place of seeds it produces a great abundance of small bulbs or bulblets which appear where flowers and seeds normally appear on other blue grasses. Stock is very fond of this grass, and judging from the way cattle thrive on it, it has a high feeding value. It should prove particularly valuable on lands used for fall, winter and spring pasture. Since this plant grows only during the rainy season, it should prove valuable in Southern Oregon on the non-irrigated foothills and shallow lands now idle, owing to summer drought.

Rhode Island Bent

(*Agrostis stolonifera*)

4-5 lbs. per 1,000 sq. ft. for Lawns.

8-12 lbs. per acre for Pasture.

The natural Rhode Island Bent makes up much of the pastures of New England and north Atlantic states, and it is not infrequently cut for hay. Rhode Island Bent is distinguished from red-top by its smaller size, narrow leaves, short ligule, and its peculiar open panicle, which does not close upon maturity. It grows 6 to 24 inches in height. It is a beautiful grass and makes up a large proportion of the highly esteemed South German mixed bent seed. Seed from New Zealand of the same grass is called Colonial Bent. Unlike some other grasses it thrives well on acid soils, and its turf is injured rather than improved by the use of lime.

German Mixed Bent

4-5 lbs. per 1,000 sq. ft. for Lawns.

12-15 lbs. per acre for Pastures.

A mixture of bent grasses that has been imported from southern Europe for years for making lawns and seeding golf courses. The predominating grasses in the mixture are Redtop (*Agrostis vulgaris*), and Velvet Bent (*Agrostis canina*).

It is not nearly as desirable as Puget Sound Creeping Bent because usually only about 15 per cent of the mixture is creeping (stoloniferous rooted), while the Puget Sound Bent is practically 100 per cent creeping.

FESCUE GRASSES

Chewing Fescue

IMPORTED FROM NEW ZEALAND
(*Festuca fallax*)

30 lbs. per acre for Pasture.

1 lb. for 200 sq. ft. for Lawns.

Chewing fescue is a small, hardy, low growing grass producing very fine dark green leaves, which rarely exceed 6 inches in height and in growing have a dense turf forming habit.

As a lawn grass, the most attractive and distinctive features of Chewings Fescue are: Its very fine leaves. The short, dense growth of these leaves. Their dark green color. The good sod the grass produces—all of which contribute to that fine carpet-like effect so desirable. Chewings Fescue is a permanent grass and its turf improves with age. It never grows coarse and never produces a stubble, even though cutting of the greens be delayed. The plant is of hardy constitution and thrives on a wide range of soils, from those of a poor light, sandy nature to heavy loams, and like other grasses, the better the condition the better it grows. A special point in its favor, is its durability on the poorer types of gravelly and sandy soils.

NOTE: Lilly's CREBENT Lawn Grass Mixture contains a large proportion of this wonderful lawn grass.

Hard Fescue

(*Festuca durinscula*)

20-30 lbs. per acre for Pasture. 4-5 lbs. per 1,000 sq. ft. on Lawns and Golf Fairways.

Differs from sheep's fescue in having harsher, firmer and thicker blades and forms smaller tufts. Thrives in the shade and of late is being used for the "rough" on golf courses. Deep green in color, it grows to the ground and stands clipping and pasturing well. Reaches a height of 20 to 25 inches.



Tall Meadow Fescue

20-30 lbs. per acre for Hay.

A special strain of Meadow Fescue that has been selected with a view of perfecting a heavy producing hay plant in the sections where Meadow Fescue thrives. It grows taller and more dense than the regular variety and therefore, produces heavier crops of hay.

Meadow Fescue

(*Festuca pratensis*)

20-30 lbs. per acre for Hay or Pasture.

In Oregon, Washington and Idaho meadow fescue is regarded with considerable favor. On the basaltic wheat producing soils of eastern Washington and Oregon when a good stand of it is secured, it is undoubtedly one of the best grasses, both for hay and pasture. When used for hay it should be cut when in bloom, for then its nutritive value is three times greater than when the seed has ripened. If the difficulty in securing a good catch could be mastered it would likely become the standard for that section. After the frost has killed the native grasses, stock may be pastured on Meadow Fescue, thus reducing by several weeks the period of drylot feeding. Meadow Fescue is sometimes called English Blue Grass, which is incorrect and confusing as it is not related to the blue grasses.

Sheep's Fescue

(*Festuca ovina*)

20-30 lbs. per acre for Pasture. 5 lbs. per 1,000 sq. ft. for Lawns on light or sandy soils.

Sheep's Fescue is a bunch grass, forming dense tufts three to six inches in diameter, with numerous stiff, rather sharp, nearly erect, bluish gray leaves, two to four inches long. The plant grows 20 to 25 inches high. While the grass is decidedly tough and has a tendency to get woody it is nutritious and eagerly eaten by sheep and to a less degree by cattle. It does fairly well on light, sandy soils where the other more valuable pasture grasses fail.

It is ideal for use on the "rough" of golf courses.

Prices Change With Market Values
Get Our Prices Before You Buy
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RYE GRASSES

English Rye Grass

(*Lolium perenne*)

20-30 lbs. per acre for Hay or Pasture.

5-8 lbs. per 1,000 sq. ft. for Lawns.

Frequently referred to as perennial rye grass. It is a tufted short-lived perennial which grows $1\frac{1}{2}$ to 2 feet tall and its principal use in this section has been as an ingredient in pasture mixtures. It comes quickly after seeding and is highly relished by stock, being preferred to most other cultivated grasses.

English, or Perennial, Rye Grass is especially adapted to the country west of the Cascade Mountains, where it is quite popular, but should be even more generally grown, for it is one of the most valuable grasses. It has a high feeding value, and is good in both hay and pasture mixture. It does well on almost any soil, although it prefers rich loam or clay.

Domestic Rye Grass

20-30 lbs. per acre for Hay or Pasture.

A native species of Rye Grass in many ways just as desirable as the imported varieties. Usually not so high in price. Produced mostly in Western Oregon where it has all the habits of a true perennial.

Italian Rye Grass

(*Lolium italicum*)

20-30 lbs. per acre for Hay or Pasture.

Italian Rye Grass is supposed to be a biennial, but on the Pacific Coast it lasts almost indefinitely, and is one of our most valuable pasture grasses, as it produces green feed late in the season after other grasses are past their prime.

By allowing it to ripen seed before cutting the hay, which is perfectly safe to do as far as quality is concerned, it reseeds itself and is thus to all purposes a perennial. In pasture plots not too closely cropped this reseeding goes on naturally and for that reason Italian rye-grass is becoming quite popular on the Pacific Coast.

It makes a rapid growth, and will furnish more green pasture in midsummer than any other grass. On moist, rich soil and under irrigation the rapidity of growth and productiveness of Italian Rye grass are really wonderful.

Pacey's Rye Grass

5-8 lbs. per 1,000 sq. ft. for Lawns.

Closely related to English or Perennial Rye Grass. Valuable in lawns and where quick results are desired. It is a short seeded type and evidently is a selection of the English species.

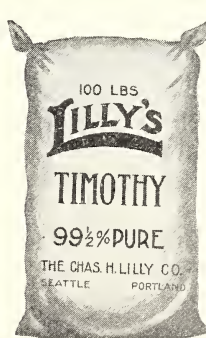
PREPARATION OF SEEDBED FOR FARM GRASSES

It is important that the soil should be well compacted so that the surface layer will retain the moisture well in order that the young seedlings will not perish from lack of available moisture, before they become well rooted. It is not essential that the surface be thoroughly pulverized by a roller or plank drag, in fact, the surface is best left covered with small lumps about one inch in diameter, which afford considerable protection for the young plants and helps retain the moisture.

Seeding should be sufficiently early in the fall to allow the development of strong plants before severe winter weather sets in, or early in the spring so that the seedlings are sufficiently well rooted to withstand summer droughts, as the moist, cool spring weather is much more favorable to the establishment of young grass seedlings than the hot, dry summer weather.

Nurse crops are valuable for seeding with grasses and clovers in that they offer protection to the tender, young seedlings from sun and wind and because they shade the ground somewhat and have a tendency to conserve surface moisture

which is vitally necessary to the young plants. The excessive and injurious growth of weeds is also held under control. It is generally best to cut the nurse crop for hay as early as practicable to prevent the possibility of a struggle between the nurse crop and the grass seedlings for moisture and plant food which generally results in injury to the grass or legume crop one is trying to establish.



Seed Grains

Oats

Oats may be broadcasted with better results than wheat or barley. Some farmers sow them on stubble land and then disc them in, but this is not considered advisable, for oats will respond to thorough seed bed preparation by increased yields which will well pay for the extra labor. Oats cannot be grown in arid sections where wheat and rye will still produce a crop. It has a vigorous, spreading root system, and will do better on sod or newly cleared land than either wheat or barley. It is best to fall plow, then disk in spring and seed with a drill.

Forty to sixty pounds of seed per acre will produce more grain on the drier uplands than heavier seeding, but 80 to 100 pounds may be used with profit on the bottom lands.

LILLY'S Gray Winter OATS—Especially valuable for fall seeding, grows tall, has stiff straw and yields heavily. Good for seeding with Gray Vetch.

Abundance OATS—Introduced from Scotland and a proven yielder on heavy soils. Medium height, erect white seeded and medium early. A spring grain.

Victory OATS—Excels all other for yield on light soils. The quality also is fine. Habit is erect and seed white. Sow in the spring.

LILLY'S Swedish Select OATS—A heavy strawed, very productive variety adapted to general conditions on the Coast. This white spring oats is very popular in all the oat growing sections.

Banner OATS—A white seeded, spreading headed spring oats that is too well known to require much description. A very heavy yielder.

LILLY'S Black Alaska OATS—A black seeded spring oats with heavy straw and much foliage. Good to sow with vetch or peas and fine for hay or green feed.

Skookum OATS—A selected white oats intended for use as hay, as no particular attention is given to keeping the strain pure.

Speltz or Emmer

Apparently a species of wheat which retains its hull when threshed and resembles beardless barley when growing. It is very hardy, though not grown much commercially. Does quite well on poor soils and likes warm, sheltered locations. Culture same as for wheat.

Prices on Application

The prevention of smut in grain by treating the seed at planting time is one of the best paying operations on the farm.

SEMESAN, the new **DU PONT** seed disinfectant is easy to apply, not expensive and does make seeds healthy. Yields are increased and quality improved.



Barley

Barley likes well tilled soil and for that reason should follow a cultivated crop. The soil should be plowed in the late fall or early spring six to eight inches deep and a good seed bed prepared by harrowing or disking till the surface is loose, but the sub-surface down two or three inches is reasonably firm. Spring barley should be seeded as early as the ground is fit to work. This varies from the middle of February for the drier uplands to May 1st in the wetter lowlands. One bushel (48 lbs) per acre is sufficient to sow in the drier sections of the Northwest, but as much as two bushels (96 lbs.) should be seeded in the fertile lowlands of the coast. Cut for hay while the kernels are in the dough stage and for grain when the joints of the straw turn brown before fully ripened.

Jilly's "Success" BEARDLESS BARLEY—An exceptional strain of true beardless barley that was perfected by the Washington State College. Very heavy producer. Good for hay or grain.

White HULLESS BARLEY (Beardless). It threshes out like wheat and grows beardless. More productive and two weeks earlier than wheat, making it a splendid spring sown crop in some sections.

Common BEARDED BARLEY—A white six-rowed variety of bearded barley that is still very popular. It is sufficiently hardy that it can be sown in the fall in sheltered localities west of the Cascades.



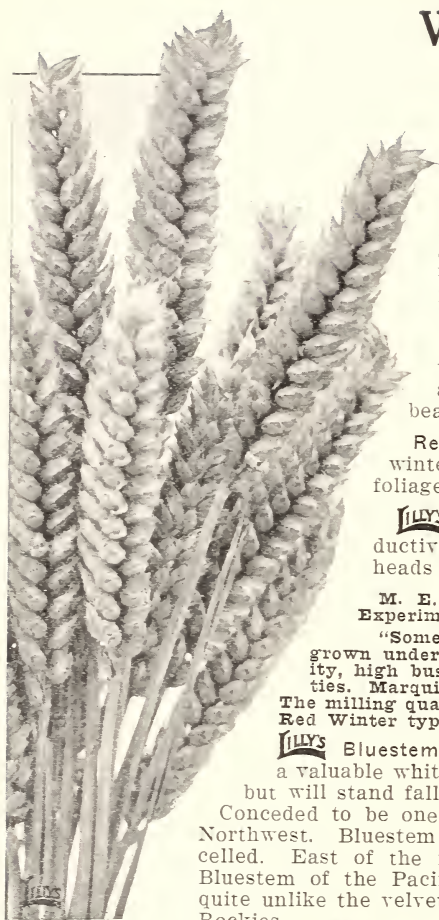
Buckwheat

Buckwheat may be grown on rough, poorly prepared land, but it will respond to better treatment with an increase in production. The land should be plowed early to allow time for the vegetation or manure which is plowed under to decay. Occasional harrowing before planting is advisable to conserve moisture. Seeding should be delayed until the soil is warm, as buckwheat is very sensitive to frost. June is the month to seed. Shallow seeding with a drill, 50 lbs. per acre, gives the best results. The variety known as Japanese Buckwheat is harder than other varieties for the Northwest. The crop is usually harvested with a binder shortly after the first blooms have matured seed. It is well to cut in early morning or on cloudy days to prevent shattering. This crop, in the Northwest, is used principally for bee pasture, but in the real Buckwheat sections it is grown for grain which is ground into flour and makes excellent hot cakes.

Flax

The land for flax should be plowed as long before seeding as possible to allow the seed bed to settle together. Just before seeding the ground should be harrowed so that a shallow mulch about an inch deep is obtained. The seed should be drilled one to two inches deep at the rate of 30 to 70 lbs. per acre for seed, or 50 to 110 lbs. for fiber.

Wheat



Wheat is the standard grain crop of the Northwest. It is grown under wide variations of temperature, elevation and rainfall. Fall wheat should be drilled in at the rate of from 45 to 50 pounds per acre on a rather loose, cloddy seed bed. Spring wheat does better when drilled in early on a seed bed that is rather firm below the first two or three inches. Harrowing wheat is of doubtful value unless the ground is badly crusted or foul with mustard or other weeds. As a rule, winter wheat yields more than spring wheat. For silage or hay, wheat should be cut in the dough stage, but for grain it should be well matured.

JILLYS Pedigreed Sun WHEAT—A remarkable variety of winter wheat. It is red seeded, smut and rust resistant and a heavy yielder. It is beardless.

Red Russian WHEAT—A late maturing variety of winter wheat, producing heavy yields and dense foliage. Matures late.

JILLYS Marquis WHEAT—Extremely early and productive as well as hardy. Straw is stiff, seed is red, heads long and free from beards. A spring wheat.

M. E. McCollam, Agronomist, Washington Agricultural Experiment Station, says of it:

"Some desirable characteristics of Marquis Wheat as grown under Western Washington conditions are early maturity, high bushel weight non-lodging and non-shattering qualities. Marquis Wheat should be cut when it is not too green. The milling quality of this wheat is distinctly better than the soft Red Winter types.

JILLYS Bluestem WHEAT—The popular Pacific Coast strain of a valuable white seeded wheat. Mostly used as a spring wheat, but will stand fall seeding in sheltered sections.

Conceded to be one of the most valuable Spring varieties for the Northwest. Bluestem has long been the standard and is still unexcelled. East of the mountains it is very extensively grown. The Bluestem of the Pacific Coast has a white grain and smooth chaff quite unlike the velvet chaff and red grains of the States East of the Rockies.

Rye

Rye has been aptly called the "Grain of Poverty" because it is better adapted to poor soils than other grains. This fact should not prevent its culture on fertile soils where it will produce enormous crops of forage, pasture or grain. It is very hardy, and where sown early in the fall makes good late fall, winter and spring pasture. It should not be pastured until after it starts to joint and if intended for pasture should be sown quite thick. The rate of seeding varies, 80 to 200 pounds, depending on the nature of the soil and the purpose of the crop.

Where the rye is to be used primarily for pasture on the better soils one or two pounds of Dwarf Essex Rape to the acre will add to the value of the pasture, but on ordinary upland soils, it will not be of much value. Rye should be seeded a little heavier for pasture than for other purposes.

Rye is not yet raised to any extent in Western Washington for grain, but some sections are beginning to grow it for that purpose. Where more rye is grown than is needed for other purposes it may very well be left for seed.

JILLYS Rosen RYE—Introduced by the Michigan State College from Russia; this variety has taken the rye growing sections by storm, heavy yielding, large seeded, high quality rye. The best winter variety by far.

Common RYE—A selected strain of the common fall rye that has been grown in this country for years.

JILLYS Spring RYE—This strain was perfected for us by the Washington State College and is grown for us under their supervision. A good yielder and a valuable addition to our list of grains.

Prices on Application





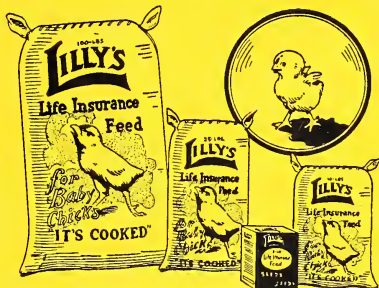
Life Insurance Feed

For Baby Chicks

A proven chick starting food, one that you can depend on. A genuine baby food that gives day-old chicks a quick, healthy start.

It's cooked to insure its wholesomeness, make its quality absolutely uniform and hasten its assimilation.

That the formula is correct is attested by the fact that it has withstood critical poultrymen's tests for seven years without the slightest change.



3-lb. Carton
30c

10-lb. Sack
75c

25-lb. Sack
\$1.50

100-lb. Sack
\$5.75

It's Cooked



Bird Foods

Parrot Food

A mixture that supplies parrots with a properly balanced ration and the variety that they crave.

2-lb. Package 45c



Holly Bird Seed

Made from first quality Sicily Canary, Sweet Rape, Yellow Millet and Hemp. Packed with cuttle bone and grit.

1-lb. Package 20c

Adelphia Bird Seed

A quality seed mixture made after the formula of a famous authority on feeding cage birds. Contains Maw.

1-lb. Package 25c

Bird Gravel

Sharp and flinty, supplies the grinding edge properly to break down the fibrous portions of the ration.

1-lb. Package..... 15c



Calf Meal

Every pound of Lilly's Calf Meal has as much feeding value as a gallon of whole milk for calf feeding purposes.

A most important feature in the ration of young animals is UNIFORMITY, and this quality should embrace the composition, mixture, texture, analysis and digestibility of the feeds used.

Raw Feed Mixtures Always Vary

Analysis of two samples from different portions of a raw mixture reveal great variation in all the important phases.

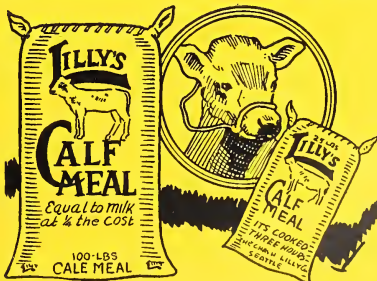
This is not true with a properly cooked mixture like Lilly's Calf Meal.

Cooking makes the entire mass uniform, increases its palatability, improves its digestibility and, above all, prepares it so the baby calf can eat it freely without danger.

Cooked 3 Hours

25-lb. Sack
\$1.50

100-lb. Sack
\$5.75



POULTRY REMEDIES AND SUPPLIES



MITE LIQUID

For the Control of Mites and other Vermin in Poultry Houses

It is ready for use and does not require diluting. It is best applied with a small spray pump, and should be sprayed on roosts, dropping boards, nests and all places where mites can hide, giving special attention to cracks and corners.



Quarts	\$0.50	
1/2 Gallon75
1 Gallon		1.10
5 Gallons		4.00



INTESTINAL and LIVER REMEDY

For White Diarrhoea, Worms, Liver and Intestinal Troubles

Prevents and cures the ailments of the liver and intestinal tract of baby chicks. There are directions on each bottle.

7-Oz. Bottles	Each	25c
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LICE POWDER

A great help in controlling body lice on Poultry

Before a hen is set, she should be dusted thoroughly. The nest should also be dusted. This will avoid three weeks' torture for the hen, she will not desert her nest, and the chicks will not inherit lice. Brooders and houses where chicks are kept should be dusted frequently.



12 Oz. Carton	25c
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SODIUM FLUORIDE

Positively the best agent for the destruction and control of all kinds of lice on poultry. Can be used both as a dust and as a dip. Only a small quantity is required.

4-Oz. Package	20c
8-Oz. Package	40c
1-lb. Package	50c



POULTRY PEPPER

In cold, wet weather it gives tone to the system, puts vim and snap into the birds, and is a great help to egg production.

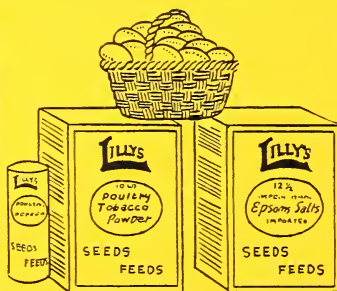
Carton, 12-Oz.	25c
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TOBACCO POWDER

A very effective agent for controlling round worms in poultry. Used also quite generally in the dust bath for body vermin, and a very effective fumigant when burned in poultry houses.

1-lb. Carton	15c
10-lb. Carton	75c



COD LIVER OIL

The importance of Vitamins in the rations of poultry and livestock has been quite clearly defined during recent years. Especially are the fat soluble vitamins, A and D, important in the maintenance of bodily vigor and prevention and cure of diseases. Lilly's is genuine imported Norwegian Oil.

Barrels, 30 gallons	Each	\$46.75
5 Gallon Cans	Each	10.00
1 Gallon Cans	Each	3.00
Quart Cans	Each	.90



EPSOM SALTS

To keep chickens in top-notch condition it frequently becomes necessary to administer laxative doses of Epsom Salts. Following infections of Roup, Sorehead, etc., and treatment with Tobacco for Worms, purgative doses are sometimes advisable. Directions for both are found on the package. This salt is fine technical quality, imported from Europe.

One Pound Cartons15c
Ten Pound Cartons	75c

FIELD CORN

Plant 15 lbs. per acre in hills. 20-25 lbs. in drills for fodder.

The earlier varieties of field corn are best adapted to Northwest conditions, planting in drills gives the greatest yields and the best plan is to plant rather early and take a chance on a spring frost rather than to chance freezing in the fall. Fertilize freely and cultivate often. The best yields are obtained if plenty of room is given the rows. The corn plant develops a great number of small fibrous roots just below the surface of the ground which spread in all directions for several feet. Because of this habit corn should be laid by when it is two feet high and the last cultivation should be rather shallow.

The field for corn should be plowed in late fall, about eight inches deep, and left rough. If it is not possible to fall plow, early spring plowing should be somewhat shallower and should be harrowed at once. Just before planting, a seed bed should be prepared with disk and harrow to a depth of about three inches. It is important to do this just before planting to give the corn an even start with the weeds.

Corn should be planted until the ground

begins to get warm. The average date to plant is May 10th. This may vary from April 15th to June 1st in different sections of the Northwest. For silage some prefer to drill the seed in rows $3\frac{1}{2}$ feet apart with plants 8 to 15 inches apart in the row. Better cultivation can be given if the corn is planted in hills $3\frac{1}{2}$ feet apart each way. For seed production there should not be over two or three stalks in a hill.

The corn field may be harrowed once or twice before the corn is large enough to cultivate. This will keep the soil loose and kill small weeds as they are coming up, and will reduce the number of cultivations required.

Corn is raised in the Northwest primarily for silage, but it may be shocked and fed as fodder or cribbed and fed as grain in the sections of longer seasonal growth.

**Seed Corn
Treated with
SEMESAN
grows better.**

**Order
Seed
Corn
Early**

We Can Supply the Following Varieties:

JILLYS MINNESOTA NO. 13—Is considered the best yellow dent variety for the Northwest. It is early maturing, heavy yielding and is admirably adapted to our conditions.

MINNESOTA No. 23—One of the earliest varieties of yellow dent, sometimes called white cap dent.

RED COB ENSILAGE—A special variety grown for fodder and ensilage and not for grain.

JILLYS PRIDE OF THE NORTH—Early maturing, heavy yielding, long kernalled yellow variety, recommended for the Northwest.

CHAMPION WHITE PEARL—A large, late white dent corn, suitable to favored sections.

KING PHILLIP—An early maturing variety; the kernels are slightly dented and mature hard and flinty, stalks are large, among the earliest to mature.

NORTH WEST-ERN RED DENT—An early maturing red dent corn desirable in high altitudes and where seasons are short.

**We offer only
tested seeds.
The varieties
are dependable.**



Forage Crop Seeds

By the judicious selection and planting of forage crops, green or succulent food may be provided for the dairy cow, laying hen or other farm animals during practically the entire year. That a much greater amount of feed can be obtained from the same area of land by this system as compared with pasturing is a fact well recognized by the progressive farmer. Much of the tillable land of this region is now very valuable. As values advance beyond the limit where farm land may profitably be used for pasture and it becomes necessary for the small farmer to keep the maximum number of stock upon his few acres of tillable land, the growing of forage crops becomes of vital importance.

Early Amber Cane

Sorghum

3-5 lbs. per acre in drills.

The early amber is the most common variety of cane grown. There are two ways of planting it; one is by broadcasting, sowing from one to two bushels per acre, the other is to drill with a corn planter and cultivate the same as you would corn.

It can be sown any time in May or June and be harvested any time between the time it is a foot high and the first freezing weather.

The cane plant produces from three to eight tons per acre of cured forage and it will withstand drought and other unfavorable conditions that would mean death to any other crop.

However, it is a hot climate crop and only partially succeeds most seasons west of the mountains.



Verified SEEDS from the NORTH are offered with pride as the best seeds it is possible to buy. Years of production experience, knowledge of variety characteristics, proper cleaning and testing equipment are all reflected in your final success and satisfaction.

1000 Headed Kale

1 oz. makes 2000 plants, 1-lb. plants an acre.

A deep, well drained rich loam soil is best for this crop, hence the ordinary valley silt loam soil, if well drained, thoroughly tilled, and heavily manured, will produce excellent yields. A long, narrow, slightly sloping field running alongside a piece of sod ground, or a wide sodded fence row, or one of the farm lanes is preferable, as the hauling then may be done on the firmer ground during the wet winter weather. The kale should not be planted on the sod ground itself, however, as this often leads either to injury from cutworms or from drying out of the soil where the sod is not thoroughly broken down.

The kale ground should be heavily manured and deeply plowed in the fall if possible, and reseeded once in the early spring, and again before transplanting. If fall plowing cannot be done, manuring during winter and spring and deep early spring plowing and discing, repeated twice before transplanting, will put the ground in good shape. Following the second plowing and discing the ground should be kept clean of weeds and thoroughly mulched to conserve moisture by frequent light harrowing until transplanting time.

For transplanting, the seed should be sown in drill rows about three feet apart, as early in March as it is possible to get on the ground. If possible a strip of the best drained ground on the farm should be used for growing the young plants, and this should be manured and plowed in the fall so that it need only be reseeded and worked down at once for seeding in the early spring, thus getting the plants

started as early as possible. On sandy loams the seeding need not be done so early, unless very early fall feed is desired. One pound of seed will furnish more than enough plants for an acre.



Thousand Headed KALE—The abundant, enormously large, cabbage-like leaves are sweet and tender.

**Pkt., 5c; Oz., 15c;
1/4 lb., 25c; Lb., 80c**



Kaffir Corn

3-5 lbs. per acre in drills. 40-50 lbs. broadcast for fodder.

An excellent fodder plant. It grows 4 to 5 feet high, making a straight upright growth. The stem or stalk bears enormous wide leaves. The stalks are brittle and juicy, not hardening like other varieties of Sorghum. It makes excellent fodder, either green or dry, which is highly relished by cattle and all kinds of stock. Planting should be done about May 10th in drills and cultivation should be same as for corn. Requires much warm weather for best results.

Prices Quoted on Request

Marrow Kale

or "Chou Moellier"

1 oz. makes 2,500-3,000 plants.

The culture is the same as for Kale and Cabbage.

Marrow Kale or Cabbage is a hybrid secured by crossing kohlrabi thousand headed kale and the Jersey chou. It resembles kale very closely when young, but as it grows older the stalk enlarges, reaching a diameter of from three to six inches at the largest part. The stalk varies in height from two to four feet, depending upon the richness of the soil, and often weighs ten or more pounds. It has a solid pith, or marrow, and it is from this that it takes its name. A peculiar habit of the marrow cabbage is that the lower leaves enlarge and then turn yellow and fall off. Then the next lower leaves enlarge and in due time turn yellow and fall, and so on until the stalk becomes bare for two-thirds or more of its length. These leaves may be pulled off and fed just before they begin to turn yellow. The stalks are relished by cows, hogs and poultry and the tonnage per acre is enormous.

Pkt., 5c; Oz., 35c; 1/4 lb., \$1.00;
Lb., \$3.00



Millet

20-30 lbs. per acre.

Millet is used as a catch crop where some other crop has failed, as it is one of the quickest crops to mature. It requires hot weather to germinate and produces a good crop when planted as late as June or July. It should be planted shallow, about one inch deep, on a rather firm seed bed.

Millet makes very rich hay if cut just as the last heads are out of the boot. For seed it should be cut rather green (the leaves and stems are still green after the seed is mature) and allowed to cure in the bundles, which should be shocked in bundles two and two.



We Can Supply the Following Varieties:

GOLDEN OR GERMAN MILLET — Medium early, yellow seeded, fine for hay or forage, also a heavy seed producer.

JAPANESE MILLET — Often grows six feet tall and yields enormous tonnage of hay and forage, sometimes called billion dollar grass. Especially valuable as a source of green feed for cows during the summer months when pastures have dried up and spring sown oats and vetch or peas have reached maturity.

SIBERIAN MILLET — Best for localities having hot weather, resists heat and drought well, produces abundantly.

HUNGARIAN MILLET — Earlier than Golden Millet and less productive of seed, but a splendid forage crop. Has slender stems and much foliage.

YELLOW HOG MILLET — The best strain of broom corn millet; yield seed in great abundance. Forage is rather coarse.

Prices Are Influenced by Market Conditions

Get Our Prices Before You Buy
Buy Verified Seeds

Rape, Dwarf Essex

3-5 lbs. plants an acre.

Rape (*Brassica napus*) has been grown in the coast region with excellent results for twenty years. It is a succulent, nutritious forage plant, admirably adapted to the moist mild climate of the Pacific Coast. It stands considerable freezing and is seldom winter-killed west of the Cascade Mountains. It does best on peaty soils, but is not adapted to very light, sandy or heavy clay soils. It is a heavy feeder, and must not be expected to succeed on poor, worn-out land.

Rape is an excellent crop for pasture or soiling, i. e., for cutting and feeding green for hogs, sheep, goats and poultry. Fed to dairy cows it causes a large flow of milk, but to avoid tainting the milk it should be fed immediately after milking, at the rate of 30 to 50 pounds per day, in two feeds. On account of danger of bloating, sheep, goats and cattle should never be turned on rape for the first time when they are hungry, or when the rape is wet with dew or rain. They should have plenty of something else to eat first, and plenty of salt at all times. It is a good plan to give them access to hay or a grass pasture to prevent overloading on rape. When sheep have become accustomed to it they may be left on it continually with but little danger.

Sunflowers

Plant 10-15 lbs. per acre.

Sunflowers have attracted a good deal of attention the last few years as a Silage Crop. Planted and cultivated like corn, enormous yields are produced. (Yields as high as 30 tons have been reported per acre.) In the higher altitudes and under dry farming conditions the average yields per acre are greater than that of any other crop.

It is used extensively for feeding poultry and is an excellent egg producer. Also



largely planted for hiding unsightly places. The plant often grows ten feet high. Sow seed as soon as ground is fit for planting corn, in rows three to four feet apart and about one foot apart in row. Cultivate the same as corn. This variety will yield 1,000 pounds or more of seed per acre. They do best on light, rich, limestone or alluvial land well supplied with moisture and not shaded by trees or buildings.

LARGE RUSSIAN—This has very large single heads borne at the top of a single unbranched stalk usually, and with much more and larger seed than the common sorts.

Soy Beans

30-50 lbs. per acre.

Not well adapted west of the mountains. Only the earliest varieties of soy beans are ever grown successfully in the Northwest, as they are very sensitive to frost and require a relatively hot season to mature, much like the sorghums. Soy Beans do best when planted in rows and cultivated. Much the same method of culture is used for Soy Beans that is used for raising garden beans. The stems are woody and of questionable value for roughage, but the seeds are rich in oil and are considered a very concentrated food.

Soy bean meal is the basis of many choice dishes served by the Chinese and Japanese; however, in this country it is used as one of the sources of protein in poultry and dairy feeds.

Chicken Lettuce

This variety of lettuce should not be confused with the regular heading or loose-leaved varieties. The plant grows very much like kale, to a height of four to five feet, with much growth of leaf. It is used mainly for chicken and rabbit feeding. It absolutely does not head and is seldom, if ever, used for table purposes. The wonderful leaf growth makes it ideal for green food for chickens, etc.

Pkt., 5c; Oz., 15c; 1/4 lb., 50c; Lb., \$1.40

Field Pumpkins

4 lbs. plants an acre.

They require quite a long season and should be planted as early as frost danger is past. Sandy loams are preferred. Plant in hills eight to ten feet apart each way and allow only three or four plants to remain in a hill. Because of their spreading habit Pumpkins are generally planted in patches or fields of corn or potatoes where the vines can grow undisturbed and frequently produce many tons of very desirable hog and cattle feed. Plant some this year. We recommend the following varieties:

JULY'S CONNECTICUT FIELD—Large productive field pumpkin, very good also for pies.

LARGE CHEESE—Large, abundant fruiting sort, thick meat, suitable for canners.

JUMBO OR KING OF MAMMOTHS—The largest grown, skin salmon orange, meat very thick.

Prices Gladly Quoted on Request

ROOT CROPS

Artichoke

Jerusalem

Plant 6-8 sacks per acre.

A tuberous-rooted sunflower-like plant that thrives on any soil and is grown for the food value of its tubers. All kinds of farm animals seem to be fond of them. They are propagated the same as potatoes, the seed tubers often being cut to single eyes. Leave the matured tubers in the ground until wanted, frost does not injure them. If grown for hogs let them do their own digging. Established fields will volunteer crops for years if not "hogged out" too closely. Used also in a limited way, for human consumption as a salad.

JERUSALEM ARTICHOKE — Season March 1st to May 15th.

Price on Application

Mangel or Stock Beet

1 oz. plants 100 feet of row. 10-15 lbs. per acre in drills. 6-8 lbs. per acre in hills.

Culture is very similar to table beets except that the rows are planted from sixteen to twenty-four inches apart to allow

for horse cultivation and because the roots attain enormous size they are thinned to stand twelve to sixteen inches apart. Plant during late May or early June on well prepared seedbed that has been lightly fertilized. It pays to grow Mangels on your best piece of ground. Keep well cultivated and free from weeds. The matured roots will not stand freezing and must be stored where they can be protected.

It is a regrettable fact that farmers and stock raisers in this Western country do not fully appreciate the great value of Mangels for feeding Cattle, Sheep and Hogs. In Great Britain and in fact all other European countries root crops are grown on a large scale on every farm. Mangels are considered

indispensable where stock of any kind is kept. From an economical point of view the Mangel crop is one of the most profitable on the farm as is amply demonstrated by the immense yields which are produced from an acre at very little outlay either in material or labor.

Prices All Varieties

Pkt., 5c; $\frac{1}{2}$ lb., 20c; 1 lb., 40c;
10 lbs., \$3.50

JULY'S

SLUDSTRUP — Long, tapered, smooth, of immense size, reddish yellow color, grows well above the ground, remarkable yielder. This is an improved Danish Sludstrup.

GIANT INTERMEDIATE — Roots large, medium length, neck small, flesh white, a big cropper.

LONG RED MAMMOTH — Very long, large red skinned roots, flesh tinged red, grows well above ground.

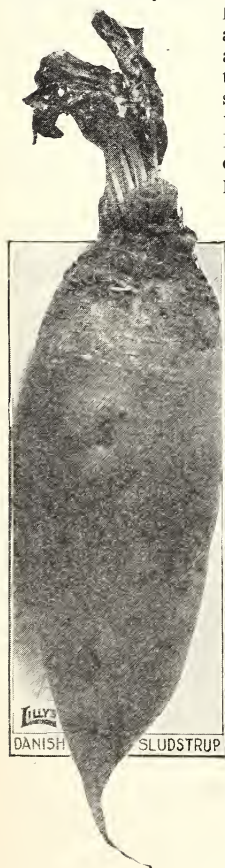
HALF SUGAR ROSE — Good sized white roots, combining size of Mangel with sweetness of Sugar Beets.

GOLDEN TANKARD — Short, tankard shaped roots of immense size, flesh yellow.

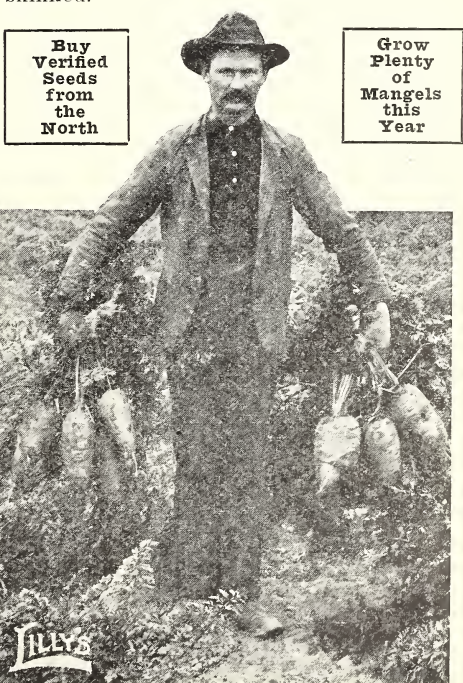
YELLOW GLOBE — Has very small top and grows on top of the ground, yellow.

RED ECKENDORFER — Grows mostly above the ground, blunt point, cylindrical form.

GIANT YELLOW ECKENDORFER — Like the red sort listed above, but yellow skinned.



JULY'S
DANISH SLUDSTRUP



Buy
Verified
Seeds
from
the
North

Grow
Plenty
of
Mangels
this
Year

JULY'S

Sugar Beet

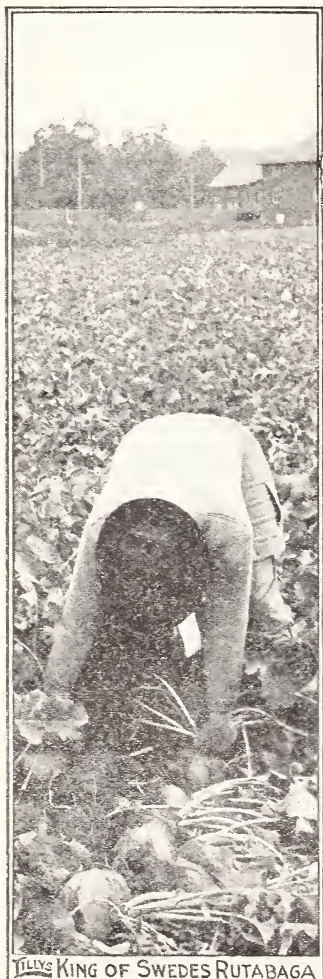
1 oz. plants 100 feet of row. 10-15 lbs. plants an acre.

Sugar Beets are desirable not only for sugar making, but are valuable for stock feeding and when small may be used for the table. The best soil is a rich, friable sandy, or clayey loam. Rich, mucky soils will often give an immense yield of roots which, though excellent for feed, are of little value for sugar making.

KLEIN WANZLEBEN — Roots larger than most varieties, tops large, leaves waved.

1/2 lb., 20c; 1 lb., 40c; 10 lbs., \$3.50

Prices of many seeds vary with market conditions. It is always best to get the latest prices before you buy. We always give you the benefit of the lowest prevailing prices.



JULY KING OF SWEDES RUTABAGA

Stock Carrot

1 oz. for 250 feet of row. 2 1/2 lbs. plants an acre.

Culture same as for table use except that more space is required in the field. They keep well and make excellent stock feed.

LARGE YELLOW BELGIAN—Is similar to the white sort listed below, but orange color; said to be richer.

Pkt., 5c; Oz., 15c; 1/4 lb., 45c; Lb., \$1.20

Price Following Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 35c; 1 lb., 90c

LARGE WHITE MASTODON—Creamy white in color, of immense size and often producing 25 tons per acre.

IMPROVED SHORT WHITE—Roots 7 to 9 inches long, smooth, heavy at the shoulder, and very productive.

WHITE BELGIAN—Smooth, well shaped, tapered roots, greenish-white in color, heavy yielder.

Rutabaga

1-2 lbs. plants an acre.

Sow the seed from the middle of June to the middle of July, in drills about two and one-half feet apart, covering about one-half inch deep. Thin the young plants eight to twelve inches apart in the row. When the roots are full grown and before hard freezing weather, pull them, cut off the tops and store in a root cellar or pit.

Prices All Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 25c; Lb., 75c

JULY King of SWEDES—Large, productive, oval shaped, flesh rich yellow, splendid keeper.

AMERICAN PURPLE TOP—Popular for table use and stock, flesh yellow, solid and sweet.

BANGHOLM—Very large, flesh mild, firm and sweet, color yellow, texture fine.

Turnip

2-4 lbs. plants an acre.

For fall and winter use, the seed should be sown in August or September. For stock food, the seed is sometimes sown broadcast in the field after last cultivation of corn or other cultivated crops.

Turnips are quite hardy and need not be harvested until after several frosts. West of the Cascade Mountains they are sometimes left in the ground until wanted for use during the winter. They may be stored in a cellar or buried in a pit.

Prices All Varieties

Pkt., 5c; Oz., 15c; 1/4 lb., 30c; Lb., 75c

PURPLE TOP WHITE GLOBE—Early, globe-shaped, medium sized, yields heavy and keeps good.

PURPLE TOP STRAP LEAVED—Roots flat, medium size, flesh white, fine grained and tender.

GOLDEN BALL OR ORANGE JELLY—Delicious flavored, smooth, round, yellow flesh and skin.

YELLOW ABERDEEN—Large, late, sweet, yellow fleshed, long keeper and very productive.

COWHORN—Long, crooked shaped, white, fine grained, quick growing stock turnip.

Seed and Planting Record

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INDEX

Abronia	30	Echinocystis	39	Onions	19
Adonis	30	Egg Plant	13	Onion Sets	18
Acroclinium	30	Endive	10	Orchard Grass	61
African Daisy	30-32	English Rye Grass	69	Pacey's Rye Grass	69
Ageratum	30	Eschscholtzia	39	Pansies	47
Alfalfa	58	Euphorbia	39	Parsley	20
Alsike Clover	59	Evening Glory	40-42	Parsnips	20
Alyssum	31	Evening Scented Stocks	40-44	Pasture Mixtures	65
Amaranthus	31	Evergreen Lawn Grass	57	Peas	21-22-52-53-62
Amber Cane	74	Fennel	33	Peppers	20
Anemone	32	Fescues	68	Perennial Aster	48-45
Anise	13	Field Corn	73	Petunia	48
Antirrhinum	31	Field Peas	62	Phlox	48
Aquilegia	31-37	Field Pumpkins	76	Pinks	48
Arabis	32	Flax	71	Poa Bulbosa	67
Arctotis	32	Flowering Flax	40-43	Poa Trivialis	67
Argemone	32	Flowering Sage	40-50	Poppies	49
Artichoke	4-77	Flowering Tobacco	40-45	Portulaca	46
Asparagus	4	Forget-Me-Not	39	Potatoes	23
Aster	32-33	Four o'Clock	40	Pot Marigold	49-34
Baby's Breath	32-41	Foxglove	40-39	Primrose	49
Baby Eyes	32-45	Gaillardia	40	Puget Sound Bent	67
Bachelor Button	34-36	Geranium	41	Pumpkin	24-76
Balsam	34	German Mixed Bent	67	Purplea	49-50
Barley	71	Geum	40	Pyrethrum	49
Basil Sweet	13	Godetia	40	Radish	25
Beans	4-5-53	Gomphrena	40	Rape Dwarf Essex	76
Beets	6-77	Gourds	40	Red Clover	60
Bellis	34	Gypsophila	41	Red Top	64
Bent Grasses	67	Hard Fescue	68	Rhodanthe	50
Blue Grasses	67	Hay Mixture	66	Rhode Island Bent	67
Blue Lace Flower	34	Helianthus	41-54	Rhubarb	24
Broccoli	6	Helichrysum	41	Ricinus	50
Brome Grass	64	Heliotrope	42	Rock Cress	50-32
Brussels Sprouts	6	Herbs	13	Rosemary	13
Buckwheat	71	Hibiscus	42	Rudbeckia	50
Cabbage	7	Hollyhocks	42	Rutabaga	24-78
Cacalia	34	Horehound	13	Rye	72
Calendula	34	Hubam Clover	59	Rye Grasses	69
California Poppy	39	Ice Plant	42	Sage	13
Calliopsis	35	Immortelle	42-45	Salpiglossis	50
Canada Blue Grass	67	Imported Lawn Grass	57	Salsify	26
Canary Bird Vine	35	Ipomoea	42	Salvia	50
Candytuft	35	Italian Rye Grass	69	Savory Sweet	13
Cantaloupe	16	Kaffir Corn	75	Scabiosa	50
Canterbury Bells	35	Kale	14-74	Scarlet Runner	53
Caraway	13	Kentucky Blue Grass	67	Schizanthus	51
Cardinal Climber	36	Kochia	42	Shasta Daisy	53
Carnation	36	Kohl-Rabi	13	Sheep's Fescue	68
Carrots	8-78	Kudzu Vine	42	Snapdragon	51-31
Casaba	16	Ladino Clover	59	Snow on the Mountain	51-39
Castor Bean	36	Lady Slipper	43-34	South German Bent	67
Catnip	13	Lantana	43	Soy Beans	76
Cauliflower	8-9	Larkspur	42	Speltz	70
Celeriac	10	Lavender	13-43	Spinach	26
Celery	9	Lawn Grass Mixtures	57	Squash	27
Celosia	36	Lawn, Pointers on	56	Statice	51
Centaurea	36	Leek	14	Strawflower	51-41
Chervil	10	Lettuce	14-15-76	Stocks	51-44
Chewings Fescue	68	Linum	43	Sudan Grass	66
Chicken Lettuce	76	Lobelia	43	Sugar Beets	78
Chicory	10	Lupins	43	Sun Plant	54-46
Chives	10	Mangel	77	Sunflower	54-76
Chrysanthemum	37	Marigold	43	Sweet Clover	61
Cineraria	37	Marrow Kale	75	Sweet Corn	11
Citron	17	Matthiola	44	Sweet Peas	52-53
Clarkia	37	Meadow Fescue	68	Sweet William	53
Clovers	59-60-61	Melons	16-17	Swiss Chard	27
Cobaea	37	Mesquite	66	Tagetes	54-44
Cockscomb	37-36	Mexican Firebush	43-42	Tall Meadow Fescue	68
Collards	10	Michaelmas Daisy	45	Tall Meadow Oat Grass	65
Columbine	37	Mignonette	44	Tansy	13
Cornflower	37-36	Millet	75	Thunbergia	54
Corn	11-73	Mirabilis	41	Thyme	13
Corn Salad	10	Mixed Lawn Grasses	57	Timothy	65
Cosmos	38	Moonflower	45-42	Tobacco	29
Crebent Lawn Grass	57	Morning Glory	45	Tomatoes	28
Creeping Bent	67	Moss Rose	45-46	Turnips	29-78
Cress	10	Mourning Bride	45-50	Velvet Grass	66
Crested Dogtail	64	Mushroom Spawn	18	Verbena	54
Crimson Flax	37-43	Muskmelon	16	Vetch	63
Cucumber	12	Mustard	15	Violet	54
Cup and Saucer Vine	33-37	Myosotis	45-39	Wallflower	54
Cypress Vine	38	Nasturtium	46	Water Cress	10
Dahlia	38	Nemophila	45	Water Melon	17
Daisy	34-49-53	Nicotiana	45	Wheat	72
Datura	38	Nigella	45	White Clover	61
Delphinium	38	Nonpareil Lawn Grass	57	Wild Flower Garden	54
Dianthus	38-48-53	Oats	70	Wild Cucumber	54-39
Didiscus	38-34	Oat Grass Tall	65	Wistaria	55
Digitalis	39	Okra	18	Wormwood	13
Dill	10-13			Xeranthemum	55
Domestic Rye Grass	63			Zinnia	55

CONFIDENCE has no substitute. Money cannot buy it. Distance and time cannot shatter it. Business confidence is no different than the other kind for both are born of trust.

Our business is built on a solid foundation of confidence. Confidence in our customers, in the merchandise we sell and in the reward that the future holds for us.

We believe that we have earned the confidence of our customers through strict adherence to the principles of Service, a service big enough and broad enough to meet the requirements of and safeguard the interests of our customers.



BACK COVER

FLOWER

COLLECTION

A FULL-SIZE PACKET OF EACH

MIXED COLUMBINE	10c
" SCABIOSA	10c
" CALLIOPSIS	10c
" GAILLARDIA	10c
" VERBENA	10c
" STOCKS	10c

VALUE 60c

40¢